

### Definition of Inflation

By inflation, in ordinary language, we mean a process of rising prices. A situation is described as inflationary when either the prices or the supply of money are rising, because in practice both will rise together. In the Keynesian sense, true inflation begins when the elasticity of supply of output in response to increase in money supply has fallen to zero or when output is unresponsive to changes in money supply. When there exists a state of full employment, the conditions will be clearly inflationary, if there is increase in the supply of money. But since we do not subscribe to the classical view that there is full employment, we can say that when money supply increases it results partly in the increase of output (GNP) and it partly feeds the rise in prices. And when the supply of output lags far behind, the rise in prices is described as inflationary. In Coulborn's words, it is a case of "too much money chasing too few goods." Thus, inflation is generally associated with an abnormal increase in the quantity of money resulting in abnormal rise in prices.

**Inflationary Gap.** Keynes invented the term 'inflationary gap' to describe a situation when there is "excess of anticipated expenditures over the available output at base prices." In simple words, it is a gap between money incomes of the community and the available supply of output of goods and services. This has already been explained and illustrated earlier in chapter 40.

However, when discussing inflation, we are thinking of a persistent rise in prices rather than a once-for-all rise in prices (which may, for example, be brought about by a bad weather leading to destruction of crops). A rise in prices is one of the indicators of inflation rather than being its cause.

There are three main features of inflation: (a) It is a process of rising prices; (b) it is initiated by

some change which makes it impossible to satisfy the whole of the demand which is forthcoming at existing prices, so that initial price rises occur; and (c) it is propagated by the reactions of buyers or group of buyers to the initial price rise so that further rise in prices is induced.

Then, there is a type of inflation which is called **suppressed inflation**. Sometimes deliberate policies are pursued to prevent price rises in the present, but it is only a temporary muzzling of the inflationary forces. These forces are in the meantime accumulating and are bound to burst in future. Ultimately, the inflationary pressures exert themselves in full strength. This is the case with war-time price controls. When the controls are abolished the pent-up demand leads to inflationary spiral.

The various causes of inflation and methods of combating inflation are discussed in the later sections of this chapter.

**Deflation** is the opposite of inflation. It usually means an excessive fall in prices and money incomes of factors of production.

Reflation refers to a moderate degree of controlled inflation.

**Disinflation** refers to a process of a bringing down prices moderately from their high level.

"**Stagflation**" is used when there is stagnation as well as inflation, both side by side as prevailed in India in 1974-75 and again in 1979-80.

### Inflationary Process

Basically, inflation represents a situation whereby the pressure of aggregate demand for goods and services exceeds the available supply of output (both being counted at the prices ruling at the beginning of a period). In such a situation, the rise in price level is a natural consequence. Now, this disparity between aggregate demand and aggregate supply may be the result of more than one force at work. As we know, aggregate demand is the sum total of



consumers' spending on current goods and services, government spending on current goods and services and net investment being contemplated by the entrepreneurs.

The ordinary functioning of an economy should result in distributing and using income in such a manner that aggregate demand for output is equivalent to the cost of producing the total output including profits and taxes. At times, however, the government, the entrepreneurs or the households may attempt to secure a larger part of output than would thus accrue to them. If other sectors are not prepared to acquiesce in this increase in the share of output used by any one sector, all the sectors together will be trying to get more of the national output than production has provided. **This is the basic framework for the inflationary process, when aggregate demand for all purposes—consumption, investment and government expenditure—exceeds the supply of goods at current prices.**

To illustrate the above point, let us assume that the government wants to use more of national output than the ordinary functioning of the system provides through taxes and loans from the public. If the government is insistent on securing additional resources, it will get them in one way or another—by issuing currency or by borrowing from the central bank or from commercial banks. If other sectors, particularly the active sectors—entrepreneurs and wage earners, are unwilling to reduce their investment or consumption by the amount of these additional resources used by the government, an inflationary process will be initiated. Similarly, an inflationary process will be initiated if entrepreneurs wish to use more of national output than the ordinary functioning of the economy provides (through savings out of profits and savings lent or invested by the public) and other sectors do not willingly reduce their demands for resources to the extent that entrepreneurs want to use them more.

**Wage-price Spiral.** If the total claims on output exceed the available supply of output, prices will rise. The rise in prices provides the necessary mechanism whereby the real resources being used by inactive sectors are reduced for being used by the more active sectors. If, for example, the initiative for the inflationary pressure comes from the government demand for more resources, the only way that the government can have more resources is by the consumers and private entrepreneurs having less of them (assuming that all the resources were fully employed already). If they are not willing to reduce their claims on resources voluntarily, the prices will rise and the result will be that real value of spending by these sectors will be reduced and to that extent resources will be made available for use by the government.

But that will not be the end of the story. A rise in

prices reduces the real consumption of the wage earners. They will, therefore, press for higher money wages to compensate them for the higher cost of living. Now, an increase in wages, if granted, will raise the prime cost of production and, therefore, entrepreneurs will be tempted to raise the prices. This adds fuel to the inflationary fire. A further rise in prices raises the cost of living still further and the workers ask for still higher wages. In this way, wages and prices chase each other and the process of inflationary rise in prices gathers momentum. If unchecked, this may lead to **hyper-inflation** which signifies a state of affairs where wages and prices chase each other at a very quick speed. This is a state of galloping inflation. This state of affairs seemed to prevail in India in 1974-75 and again in 1979-80.

Distinction is sometimes made between Demand-pull inflation and Cost-push Inflation.

(i) **Demand-pull Inflation.** This represents a situation where the basic factor at work is the increase in demand for resources either from the government or the entrepreneurs or the households. The result is that the pressure of demand is such that it cannot be met by the currently available supply of output. If, for example, in a situation of full employment, the government expenditure or private investment goes up this is bound to generate an inflationary pressure in the economy.

(ii) **Cost-push Inflation.** We can visualise a situation where even though there is no increase in aggregate demand, prices may still rise. This may happen if the costs, particularly the wage costs, go on rising. Now, as the level of employment increases, the demand for workers rises progressively so that the bargaining position of the workers is enhanced. To exploit this situation, they may ask for an increase in wage rates, which are not justifiable either on grounds of a prior rise in productivity or of cost of living. The employers in a situation of high demand and employment are more agreeable to concede to these wage claims, because they hope to pass on these rises in costs to the consumers in the shape of higher prices. If this happens we have another inflationary factor at work.

The cost-push inflation may also be explained with the help of the figure given on next page.

In this figure AZ and AD are the usual aggregate demand and supply curves. A rise in the wage rates in the economy shifts AZ curve upward, i.e., to AZ'. This would in turn induce a rise in aggregate demand curve from AD to AD'. Let us assume that ON is the output at full employment. This would push up prices. At ON output with AD as the total demand, the average price level is  $\frac{AN}{ON}$ . At ON output with AD' as the aggregate demand, the average price level is  $\frac{BN}{ON}$  which is clearly higher



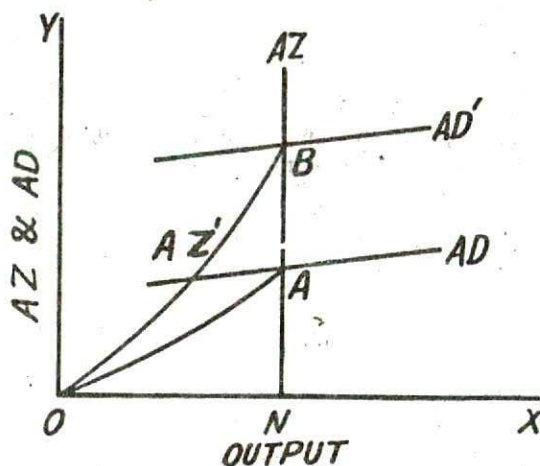


Fig. 51.1

than  $\frac{AN}{ON}$ . This higher price level would further lead to increase in the general wage rate and hence there will be another rise in the aggregate demand curve.

### THEORIES OF INFLATION

Several theories have been put forward by economists from time to time. Broadly, the inflation theorists can be grouped under two labels, viz., the monetarists and the structuralists. The monetarists attribute inflation to monetary causes and they rely on monetary measures to control it. On the other hand, the structuralists are of the opinion that inflation is due to maladjustments in the economic system and they question the efficacy of monetary and fiscal measures alone to tackle the problem. We shall examine here three main theories: (a) The market power theory of inflation, (b) the demand-pull theory of inflation and (c) the structural theories of inflation.

#### Market-Power Theory of Inflation

When one seller or a group of sellers in the market combine to establish a price different from a competitive level, we call it the market-power price. This group or groups can raise prices to any level they think profitable to themselves irrespective of the suffering inflicted on the consuming public. Sometimes the Indian Sugar Industry has behaved in this manner. The unduly high prices of sugar prevailing in the market may be attributed to the group action of the industrialists.

Many economists have advanced the market-power theory of inflation. That is, it is their view that oligopolists are normally in a position to increase their profit by raising the price of their products

even when there is no increase in demand. The trade unions keep pressing for increase in wages and fringe benefits. They succeed in securing such increases since increase in wage in the entire industry can be passed on in higher prices. Hence, oligopoly price has a constant tendency to rise corresponding to increase in wage rate. Thus an inflationary situation is created.

**Policy Implications.** This has led some economists to contend that monetary and fiscal policies are practically useless in preventing a rise in prices. These policies try to curb inflation by restricting demand. But, in a case of oligopolist rise in prices, it is not increase in demand that is responsible for inflation; it is the cost which is responsible. Obviously, monetary and fiscal policies cannot affect costs. Monetary authorities can raise the rate of interest by imposing curbs on credits, but this is of no avail, because increase in cost can be passed on in higher prices. Besides, the oligopolists raise prices step by step. They are also more credit-worthy. Hence credit curbs can affect only competitive firms and not oligopolists. Moreover, big oligopolists have open to them credit facilities provided by organized financial markets. Monetary and fiscal policies are, therefore, generally ineffective against the oligopolists. They can only control the firms operating under competition.

In this connection, we may refer to the view expressed by Professor A.P. Lerner who says that there are two basic kinds of inflation: One of the conventional sort which is caused by excess demand and the other quite different which occurs even in the absence of excess demand. This second type of inflation may be called sellers' inflation or what has been called the market-power inflation.

A peculiar feature of this type of inflation is that it is accompanied by depression, i.e., inflation and depression are to be found side by side. Prof. Lerner aptly calls it inflationary depression. Depression is inevitable because the government seeks to check inflation by reducing effective aggregate demand. Hence, Lerner also says that under these circumstances monetary and fiscal policies are worse than useless; they are positively harmful. Lerner suggests that market-power inflation can be controlled by regulating administered prices, i.e., prices administered by powerful trading groups. He recommends the establishment of a governmental regulating agency which would permit the raising of the administered prices only under certain circumstances. Rather, it may enforce decreases in such prices.

There are, however, economists like Professor Ruggles of America who regard market-power with administered pricing as relatively insignificant in the inflationary process. This view is not accepted because oligopolistic organisations do have a substantial effect upon inflationary price movements.

1. See Ferguson, C.E., and Kreps, J.M., *Principles of Economics*, 1962. pp. 686-709.



### Conventional Demand-Pull Inflation

The market-power theorists stand at one extreme and say that inflation occurs even when there is no excess in demand. At the other extreme stand the conventional demand-pull theorists. They are of the opinion that excess in aggregate demand over aggregate supply is the only cause of inflation. They refuse to admit that there can be any other cause.

When an economy is operating at full employment equilibrium, and there is increase in demand, inflation is inevitable. This is so because the economy has already reached its maximum productive capacity as it is operating at full employment level. Since the quantity of goods and services cannot be increased, inflation inevitably results from increase in demand. We have witnessed in our own country how during war and post-war years demand for goods increased manifold, and inflationary pressures were built up to raise prices to great heights.

### Structural Theories of Inflation

In between the two extremes mentioned above stands a middle group of economists. According to this group, market-power can be only one force causing inflation, but not the exclusive force. They try to explain inflation in terms of structural mal-adjustments in the economy itself or of certain institutional features of the business world. Several explanations of inflation are put forward by these economists such as the Mark-up Theory, the Bottle-neck Theory, and the Demand-composition Theory.

**Mark-up Theory.** Prof. Gardner Ackley puts forward the mark-up theory of inflation. He says that it is wrong to attribute inflation exclusively either to demand or cost. Actually, inflation is caused both by demand-pull and cost-push factors. The demand-pull inflation is caused by excessive demand for goods so that it is natural that their prices go up. But the increase in prices stimulates production and causes excess demand for factors of production and, as a result, costs rise and prices rise.

Sometimes wages may rise (as a result of trade union pressure) without excess demand for the product. This would mean that at the prevailing level of prices (which have gone up as a result of increase in wages), there is an actual or potential shortage in the supply of goods. When there is a shortage in the supply of goods, prices tend to rise.

Thus Professor Ackley suggests a model of mark-up inflation in which both elements of demand and cost inflation are to be found. An increase in demand makes the prices rise because customers spend more on goods. When goods are sold to firms, and not to consumers, the price rise becomes also a cost rise resulting in further price increases. Similarly, when wages increase costs increase resulting in higher prices. We, therefore, find that an inflationary situation may be built up or initiated either by

excess commodity demand or by an autonomous increase in wage rates. To strengthen the mark-up inflation analysis. Professor Ackley suggests that average level of mark-up used by the firms tends to rise as total demand for goods increases, and conversely it tends to fall as demand decreases. Similarly, the mark-up that unions apply to the cost of living in setting their wage rate demand also tends to rise and fall as the volume of employment respectively rises and falls.

Since, according to Ackley, total demand contributes to inflation, the tools of monetary and fiscal policies will be found somewhat useful in checking inflation, though in themselves they will not be sufficient to curb inflation.

### Bottle-Neck Inflation

According to Professor Otto Eckstein, the wage-price spiral is an important cause of inflation. All the same, it does not mean that either a simple wage push-theory or the market-power theory is an adequate explanation of inflation. After examining empirical evidence regarding inflationary periods, Eckstein came to the conclusion that the recent inflation was associated with capital goods boom and with a wage-price spiral. He found that although prices of manufactures rose generally but one or two particular industries had a very sharp increase in prices. He calls these 'bottle-neck industries' and it was his opinion that general price rise was substantially due to such industries. Of these steel was a chief bottle-neck industry. Inflation, he found was not entirely due to excess demand because there was wide-spread prevalence of excess productive capacity. It was the concentration of demand on the products of the bottle-neck industries that accounted for a considerable share of inflation.

### Demand-Composition Inflation

The last of the structural theories of inflation is what is known as 'demand-composition theory' recently propounded by Professor Charles L. Schultze. According to Schultze, neither cost-push nor demand-pull theories can offer an adequate explanation of inflation. He points out that prices and wages are comparatively insensitive to decrease in demand, but they respond rather quickly to increase in demand. In other words, if demand decreases prices and wages do not go down quickly, but if demand increases the increase in price and wages is almost simultaneous.

Schultze thinks that it is a rapid shift in the composition of demand which will lead to a general price rise, even though there may have been no increase in the overall aggregate demand or a general increase in the level of wages. A change in the composition of demand means, for instance, that there is an increase in the demand for the product of



one particular industry, whereas there is a similar decrease in demand for the product of another industry; hence total demand remains the same; only its composition has changed. The prices of the products of that industry will not change much whose demand has decreased because prices are relatively insensitive to decrease in demand. On the other hand, prices of the products of that industry will go up whose demand has increased because prices are relatively sensitive to increase in demand.

Thus, according to the demand-composition theory, it is a change in the composition of the demand, as explained above, which is responsible for inflation and not either increase in aggregate demand or a cost-push in wages. The inflationary situation of 1955-57 period seems to conform reasonably well to the demand-composition theory.

The policy implication of this theory is that because inflation does not arise from aggregate excess demand but largely from excess demand in particular sectors of economy, prices cannot be controlled by general monetary and fiscal measures. Hence what is required is the adoption of selective controls or selective monetary and fiscal policies. In India, in recent years, the Reserve Bank of India has made an extensive use of selective credit controls to combat inflationary trends.

Schultze's theory gets support from many economists now. Of course, there can be pure-demand pull inflation when goods are in short supply and demand is excessive as in the post-war II period. But demand-pull inflation does not explain why prices rise faster than increase in demand or increase in wages. Schultze's theory precisely explains this. He has explained why there can be inflation in the absence of demand-pull or cost-push forces.

### Summing-up

We have examined above the three important types of inflation theories. At the one extreme, there is the market-power theory which says that inflation is largely attributable to the market power of oligopolists and to their ability to pass on the cost increases to increases in prices, even though demand for their product has not increased. At the other extreme, is the view that if aggregate demand exceeds aggregate supply at the full employment level, inflation is inevitable. This is the demand-pull theory. Between these two extremes of demand-pull and cost-push theories lie a number of structural theories which attribute inflation to structural maladjustments in an economy. Among the structural theories, we have mentioned the demand-composition theory of Schultze which says that a shift in the composition of demand will create an inflationary situation even in the absence of either excess of aggregate demand or autonomous cost increases.

## CAUSES OF INFLATION

In the detailed analysis of inflation given above, we have referred to the basic cause of inflation, that is when aggregate demand for output tends to be excessive in relation to the supply of output. Thus, the causes of inflation may be grouped under two headings:

(1) Increase in Demand which may be due to:

- (a) increase in money supply;
- (b) increase in disposable incomes;
- (c) increase in community's aggregate spending on consumption and investment goods;
- (d) excessive speculation and tendency to hoarding and profiteering on the part of producers and traders;
- (e) increase in foreign demand and hence exports;
- (f) increase in salaries, wages or dearness allowance; and
- (g) increase in population.

These causes may operate singly or in combination with one another. Generally, the most important cause of inflation is excessive public expenditure financed by deficit financing during war or on the implementation of plans for economic development. The newly created money increases government demand for goods and services and also the purchasing power of the people through increase in disposable income.

(2) No corresponding increase in the output of goods and services which may be due to:

- (a) deficiency of capital equipment;
- (b) Scarcity of other complementary factors of production, e.g., skilled labour or technicians, essential raw materials or lack of dynamic entrepreneurs;
- (c) increase in exports for earning the required foreign exchange;
- (d) decrease in imports owing to war or restrictions on imports necessitated by an adverse balance of payments and efforts to rectify it;
- (e) speculative hoarding by the producers, traders and middlemen in anticipation of a further rise in prices;
- (f) drought, famine or any other natural calamity adversely affecting agricultural production; and
- (g) prolonged industrial unrest resulting in reduction of industrial production.

The demand-pull inflation is caused primarily by factors operating on the demand side resulting in excess of aggregate demand over the available supply of goods and services. The cost-push inflation, on the other hand, is caused by increase in



salaries, wages, the rising cost of machinery and capital equipment and of essential raw materials. Actually, all the above factors operate simultaneously to exert inflationary pressure and, if continued sufficiently long, to create hyper-inflation.

### FULL EMPLOYMENT AND INFLATION

Broadly speaking, we might distinguish in any economy two phases in its development:

- (i) a zone below full employment; and
- (ii) a full employment zone.

In the 'below full-employment zone,' it is assumed that large amount of productive resources are lying idle and are waiting for employment. In these conditions, if there is an increase in effective demand, it will lead to fuller employment of the productive resources of the community and to a higher level of business activity and output, but it will not result in higher prices.

But as the process of expansion and development proceeds apace, the volume of idle resources will shrink, since most of them will now be gainfully employed. The margin of unemployment falls and the economy is heading towards the full employment zone.

"As full employment is approached, the pressure for costs and prices increases progressively because the bargaining strength of labour is greatly enhanced and the remaining unemployed resources become less and less efficient as the bottom of the barrel is scraped. The number of the bottlenecks multiplies rapidly. Shortages are more and more difficult to overcome as substitutes are difficult to find, because the most satisfactory substitutes have already been fully employed, or nearly so. But as long as there is unemployment, increase in effective demand will increase employment. When full employment is at last attained, further increases in effective demand no longer increase employment. They spend themselves entirely on increase in prices. **A condition of true inflation sets in as full employment is reached.**"

We may, however, point out that it is not correct to assume that there is one precise point of full employment below which increase in effective demand is reflected by increase in output and employment, and above which the increase in effective demand results in higher prices. The fact is that the changes in effective demand can simultaneously affect the level of prices and the level of output in a country. Even when there is a considerable amount of unemployment, say, in a manufacturing industry, the general prices may show a tendency to rise with an increase in effective demand owing to rise in prices of primary products, especially agricul-

tural products. The rise in prices may lead to rise in wage rates. The rise in prices and wage rates push the economy to the verge of inflation.

Keynes showed why **semi-inflation is likely to develop with increasing money supplies before the point of full employment is reached** and prices rise gradually as output and employment increase. This happened in India in 1974-75.

There are five important causes which contribute to this semi-inflation: (i) Effective demand (the flow of monetary expenditure) is shared among the rise of prices, the rise of costs and the rise of output and employment. (ii) Since the productive resources are not homogeneous, the use of less and less efficient ones will lead to a diminishing return. This means higher costs and the rising supply price of output. (iii) Some resources have a perfectly inelastic supply and a series of bottlenecks are bound to raise factor prices and, therefore, commodity prices in some sectors. (iv) Increase in wage rates cannot be avoided for long. Hence, costs, and, therefore, prices, must rise. (v) Some variable factors have different degrees of price elasticity of supply. Hence, the marginal costs curve will move upwards via diminishing returns in cases where the supply of factors is perfectly inelastic.

In a structurally balanced economy, the point of full employment and full capacity output will be reached simultaneously in all sectors, where as in the case of an unbalanced economy, there may be reached full employment condition in some sectors with extensive unemployment in others. Once conditions of full capacity output and very low unemployment are reached in some sectors of the economy, price rises become more marked and show increasingly strong tendencies to lead to other price rises. Thus, the inflationary price rises become cumulative in the full employment zone.

Hence, there is a bias to secular inflation in modern industrial economy unless a very high level of employment is maintained. We may, therefore, conclude "that below a certain level of unemployment all changes in effective demand showed themselves solely as price changes and above a certain level of unemployment, the changes in effective demand showed themselves solely as changes in the level of activity." In terms of quantity theory, "**So long as there is unemployment, employment will change in the same proportion as the quantity of money, and when there is full employment prices will change in the same proportion as the quantity of money.**"

**Short-term Problem.** There is no doubt that full employment economy is highly susceptible to inflation. But the problem is a short-run problem,

2. Dillard, D.—*The Economics of J.M. Keynes*, p. 234.

3. Day, A.C.L.—*Outline of Money Economics*, 1960, pp. 295-96.



because it is only in the short run that output cannot be expanded except by slow degrees. "That is why inflation is typically a short-run phenomenon peculiar to a stationary, full-employment economy." In the long run, for a dynamic and expanding economy, inflation is no problem. It is capable of increasing output to match with the increasing demand. Thus, full employment can be maintained continuously without price inflation provided the economy continues to grow at the desired rate.

### The Phillips' Curve

Professor Phillips, formerly of London School of Economics, urged that there was a close link between the level of unemployment and the rate of wage increase. We know that Keynes was of the opinion that trade unions would tend to raise wages more rapidly when unemployment rates were higher. Phillips studied the relationship between unemployment and the rate of changes in money wages in the U.K. over the period 1862-1957. As a result of this study he seems to have discovered a stable relationship over the whole period between the rate of wage increase and the percentage of unemployment. Phillips Curve shows this relationship. It may also be considered a relationship between inflation and unemployment, because when there is inflation money wages invariably go up under trade union pressure.

Phillips' Curve is shown in the following diagram.

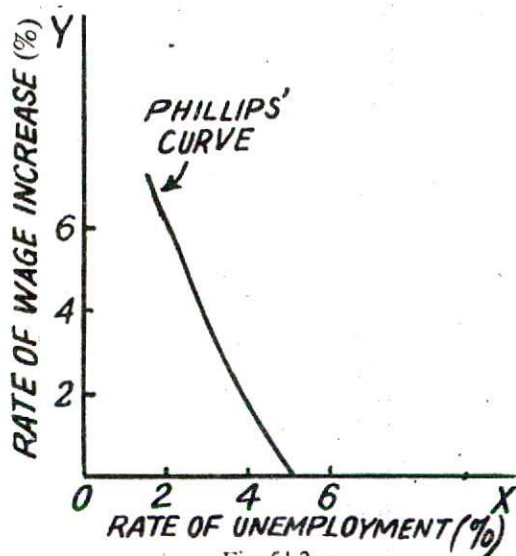


Fig. 51.2

In this figure, rate of unemployment is shown along the X-axis and the rate of wage increase along

the Y-axis, both in percentages. From this figure, which represents a hypothetical economy, we find that when wages rise by 2% per annum, unemployment goes up by 4%. Thus we may say that as wages rise unemployment rises more than proportionately. But the curve also shows that when unemployment has reached a very high level, say 5%, wages do not rise at all, which means that, in the case of widespread unemployment, the workers are more keen to get employment than to fight for higher wages.

The concept of the Phillips Curve has been widely accepted as a useful concept, though there are economists who question its realism, *i.e.*, they do not regard it as representing a realistic situation. There is no doubt that, as we have said above, in the case of widespread unemployment, there is a keen competition for securing jobs and consequently pressure for securing higher wages is correspondingly reduced.

However, Phillips' Curve may be used for establishing actual relationship between unemployment and the increase in money wages. This means that Phillips' Curve does not establish a permanent or universally applicable relationship between an increase in unemployment and increase in the rate of wages. On the other hand, a new Phillips' Curve may have to be drawn to represent a new relationship between these two variables at a particular period of time. This shift in the position of the Phillips' Curve may be represented by the following diagram.

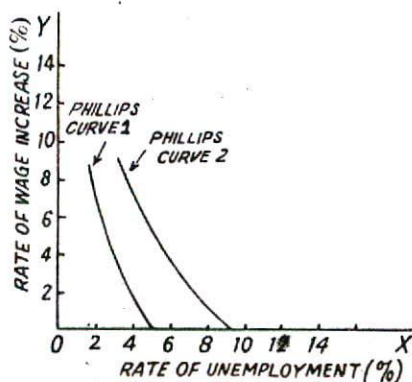


Fig. 51.3

In this diagram, two Phillips' Curves have been shown: Phillips' Curve (1) and Phillips' Curve (2). In curve (1), it is shown that the wages increase 2% per annum and unemployment increases 4%. But the curve (2) shows that if unemployment is 4%, the wages would now increase at 8%. Similarly, curve (1) shows that with 5% unemployment, there would be no increase in wages at all. But in the situation represented by curve (2), the wages would not

4. Stonier, A.W., and Hague, D.C., *A Textbook of Economic Theory*, 4th Edition, p. 569.

5. *Ibid.*, p. 570.



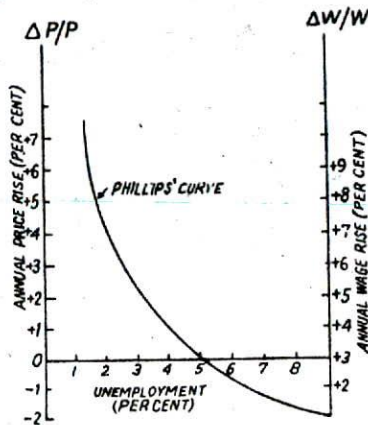
increase further only when unemployment has reached 9%.

Thus, Phillips introduced an empirically measurable relationship between the rate of wage increase and the rate of increase in unemployment into economic analysis. But it has to be admitted that it is not easy to discover exactly where the Phillips' Curve is in any economy at a particular moment. This means that no stable relationship has been discovered by Phillips between the rate of increase in wages and the rate of increase in unemployment. In view of this, it is not possible to make use of the Phillips' Curve in the formulation of economic policy.

### Trade-off Between Degree of Unemployment And Wage-Price Rise

So far we have described Phillips' curve as a relationship between unemployment and money wage rates. But, as has been mentioned earlier, Phillips' curve also depicts a relationship between the level of unemployment and price rise. The diagram<sup>6</sup> given below illustrates this double relationship (or 'trade-off' as it has been called), between the level of unemployment on the one hand and the rates of wage rise and price rise on the other.

In this diagram (Fig. 51.4), the level of unemployment (per cent) has shown on the X-axis. The



Tradeoff Between Inflation and Full Employment.

Fig. 51.4

annual price rise (per cent) on the Y-axis and the annual wage rise (per cent) on the right hand on the line perpendicular to the X-axis.

It will be seen that the right hand vertical line shows a wage rise higher (9%) than the price rise on the Y-axis (6%). This difference is explained by the 3% rate of average annual productivity growth which has been assumed. This means that if money

wages rise by 9%, the real wages will rise only by 6%. In other words, the price rise of 6% would correspond to wage rise of 9%. We see in this figure that greater is the unemployment, as shown on the X-axis, the lower is the rate of price inflation. The United States' experience, in the recent decades, shows that the Phillips' curve has shifted higher to the right as in Fig. 51.2. This means that now the degree of inflation would be kept down only by greater unemployment. If we move leftward, we shall see that unemployment is reduced as the rates of price and wage rise become higher. It also follows that if the rate of annual average productivity growth goes up, there will be a corresponding decline in both prices and wages. For instance, if productivity rate rises to 6% a year, 8% wage increase would correspond to only a 2% annual price rise.

### NATURE OF INFLATION IN A DEVELOPING ECONOMY

Developing countries in their bid to raise the standards of living of their people through development plans have often found themselves in the grip of inflation. But the nature of inflation in under-developed but developing economies is quite different from that found in advanced or developed countries. As discussed above, in advanced countries true inflation starts after the level of full-employment is attained. But in under-developed countries like India huge unemployment and inflation exist side by side. In other words, in under-developed countries, serious inflation is in evidence long before the level of full-employment is reached. This is so because the nature of unemployment in under-developed countries differs from that which prevails in developed countries during times of depression.

In order to get the economy out of depression, governments in advanced countries take various steps to increase the level of investment. The additional investment expenditure leads to an increase in effective demand depending upon the magnitude of the multiplier. But this increase in investment and effective demand does not generate serious inflationary pressures because of the elastic nature of the supply curve of output. Instead, increase in investment and effective demand helps a great deal in removing depression and unemployment which are caused by the lack of effective demand. This is the case of developed economies.

In advanced countries, during depression, there is a lot of excess capacity in the system so that an increase in output presents no difficult problems. Thus, when the supply of output can be increased easily so as to match increase in effective demand, there need be no inflationary pressures.

The situation in under-developed countries is,

6. Samuelson, P.A., *Economics*, 9th Edition, p. 832.



however, different. Here an increase in investment does create additional demand but a corresponding increase in the supply of output cannot be taken for granted. Unemployment in under-developed economies is not due to the lack of effective demand but due to the dearth of real capital.

In these countries, level of national income can be increased and the unemployment can be removed by accumulating more real capital. But increase in the rate of capital formation requires stepping up the level of investment. Now, under-developed countries, under their development plans, are making huge investment expenditure to increase the rate of capital formation and thus to obtain rapid economic growth. This huge investment expenditure leads to a sharp increase in aggregate demand for consumer goods, especially the agricultural products. Since, in under-developed countries, there is no excess capacity in the system, the supply of consumer goods cannot be increased sufficiently and rapidly to match the increase in demand for them. This leads to inflationary rise in prices.

It is worth noting that it is the food prices which first start rising rapidly in a developing economy. Rise in food prices is then followed by the rise in the prices of other consumer goods. This is so because a greater part of the increase in demand generated by the investment expenditure is spent on the food products such as wheat and rice. But the supply of these food products cannot be sufficiently increased in the short run due to the tiny size of the farms, lack of irrigation facilities, of superior seeds, fertilizers and owing to inefficient techniques of cultivation. **Income elasticity of demand for food is very high**, because the vast majority of the people are undernourished. Thus, as a result of huge investment expenditure, there is a sharp rise in demand for foodgrains, leading to increase in food prices.

In under-developed countries like India, which are predominantly agricultural, the prices of agricultural commodities, especially of food crops, hold the key position in the price structure of the country. Any distortion in agricultural prices leads to a distortion in the whole price structure.

A steep rise in food prices increases the cost of living of the people. Consumers are hit hard, as their incomes do not increase so easily to offset the increase in prices. Workers, whose cost of living rises, press for higher wages. When wage increases are conceded, the cost of production of manufactured articles rises and this, in turn, increases their prices, and so on.

Moreover, some agricultural products are raw materials for industries and increase in their prices will directly increase the cost of production of industrial goods. Hoarding of, and speculation in, both agricultural and industrial products add fuel to the inflationary fire. Thus, **once the prices of agricultural goods rise, they are likely to cause an inflationary spiral in the economy.**

A factor which deserves special mention in this connection is the mode of financing development plans. The developing countries are not in a position to finance their plans fully from voluntary savings of the people and taxes by the government. They have often to resort to deficit financing (i.e., the creation of new money) as a method of financing their development plans. Deficit financing to some extent is good and can be absorbed by the economy without experiencing inflation. This is so because, as the economy grows, its monetary sector expands and also there is an increase in production for which extra money is needed.

But, owing to acute shortage of finance, the underdeveloped countries have often indulged in deficit financing to an excessive degree. Sharp increase in the money supply with the public as a result of excessive deficit financing adds greatly to the level of aggregate demand for consumers' goods. On the other hand, the supply of consumers' goods, especially of food products, cannot be increased rapidly and sufficiently. The pressure of demand, therefore, leads to an inflationary rise in prices.

It may, however, be pointed out that investment expenditure made by the government under the development plans not only generates the additional demand for goods, it also increases the productive capacity. **Investment has a dual effect. On the one hand, it generates demand or income, on the other it increases the productive capacity.** As a result of increase in productive capacity, more output of goods can be obtained which will counteract inflationary tendencies. But, in the earlier stages of development, investment expenditure is largely made on huge dams, steel plants and other heavy and basic industries which have long-gestation periods. In other words, the long-term projects can help in increasing the supply of consumers' goods only in the long run. In the short run, prices generally shoot up under the pressure of excessive demand for goods. And once inflationary spiral starts operating, it is difficult to control it.

## CONTROL OF INFLATION

Inflation is a very complex phenomenon. There is no one sovereign remedy to combat it. On the other hand, measures have to be taken on several fronts, monetary and non-monetary, to fight it. All these measures have one common aim. They aim at reducing aggregate monetary expenditure taking the available output as given. Broadly speaking, the anti-inflationary measures can be classified as under:—

- (i) Monetary measures.
- (ii) Fiscal measures.
- (iii) Physical or non-monetary measures.

We shall now say a word about each.



### Monetary Measures

The best remedy for fighting inflation is to reduce the aggregate spending. Monetary policy can help in reducing the pressure of demand. Briefly speaking, monetary policy works by controlling the cost and availability of credit. During inflation, the central bank can raise the cost of borrowing and reduce the credit creating capacity of the commercial banks. This will make borrowing more costly than before and thereby the demand for funds will be reduced. Similarly, with a reduction in their credit creating capacity, the banks will be more cautious in their lending policies. The result will be a fall in the volume of spending. The mechanics of dear money policy is as follows:—

(i) **Raising Bank Rate.** The bank rate is the rate at which the central bank is willing to rediscount eligible paper offered by the commercial banks. The rise in the bank rate will be followed by the rise in other market rates of interest. There will be an all-round hardening of the rates of interest. A rise in the rate of interest will tend to reduce the amount of aggregate spending for the following reasons:—

- (a) Borrowing becomes more costly than before. The potential borrowers will, therefore, postpone their investment plans. They would like to wait till interest rates fall to their more normal level. A cut in investment will usually mean a reduction in the volume of spending and thereby help moderate the inflationary pressures.
- (b) Further, an increase in the rate of interest has some adverse psychological effects on business confidence. In a way, it is a red signal to the businessmen that bad times are ahead. This by itself will help to dampen their enthusiasm for additional spending on investment.
- (c) An increase in the rate of interest may make saving more attractive than before so that some people will be tempted to consume less of their income than before. This will reduce consumers' spending.

(ii) **Directly Controlling Credit Creation.** The other method is to cut directly the credit creating capacity of banks. We know that in their own interest, banks want to keep a minimum reserve of cash which bears more or less a definite relationship to the volume of their deposits. If the central bank of the country can reduce the cash available to the banking system, the capacity of the banks to lend money to the borrowers will be reduced. The banks, therefore, in their own interest will be induced to contract the supply of credit. The borrowers, now not being able to get help from the banks as easily as previously, will be forced to postpone their investment plans. The various methods of controlling the credit creating capacity of banks are:—

- (a) **Open market operations.** If the central bank wants to reduce the credit-creating capacity of commercial banks, it will sell government securities to the public or to the banks themselves. Either way, the result will be that the amount of cash with the banks will diminish and this will force them to reduce the supply of credit.
- (b) **Varying Reserve Ratios.** The same effect may be brought about by varying reserve ratios in countries where the banks are required to keep certain minimum cash in relation to the volume of their deposits and the central bank has the power to change these ratios from time to time. When it desired to reduce the credit created by commercial banks, the cash ratios can be raised, so that, for a given amount of deposits, the banks now need to keep higher cash reserves than before. This will exercise a contractional effect on bank credit.

Thus, monetary measures consist in fixing (a) higher discount rates, (b) higher reserve requirements, (c) open market operations, (d) and selective credit controls or regulation of consumer credit and varying margin requirements.

**Limitations of Monetary Policy.** Monetary policy, however, is not without its limitations. These limitations are discussed in the chapter on central banking (Ch. 53). Some of these difficulties are as follows:—

(i) An increase in bank rate may be ineffective if commercial banks do not follow the rise in the bank rate by raising their own interest rates. Where there is no tradition of close cooperation between the central bank and commercial banks, or where the central bank has no legal powers to force the commercial banks to fall in line, this difficulty will prove a great limitation on the effectiveness of monetary policy.

(ii) Even if the rates of interest do rise, they may not be able to curb spending significantly. For example, if the prospects of profits are very good, businessmen do not mind paying a slightly higher rate of interest on their borrowings. Further, investment is increasingly being financed out of undistributed profits so that the dependence of firms on banks for funds has been greatly reduced. Therefore, a change in interest rate may not disturb very much the plans for investment.

(iii) As regards the efficiency of open market operations as a curb on the lending activity of the banks, their success depends on the existence of a viable, broad-based market in government securities; otherwise open market operations even on a minor scale will exercise a greatly destabilising influence on the prices of government securities and will hamper the efficient conduct of government's borrowing operations.

(iv) A major difficulty, particularly in under-



developed countries, arises from the fact that the central bank has often not enough control over all the banks. In our own country, the organised banking sector, which is easily amenable to control by the central bank, is very small. The indigenous bankers and the village money-lenders, who do the bulk of the business of lending in the rural areas, are outside the control of the Reserve Bank.

### Fiscal Measures

The two wings of fiscal policy are government revenues and government expenditure. The government's fiscal policy can contribute to the control of inflation either by reducing private spending by increasing the taxes on private sector or by decreasing government expenditure, or combining both the elements. If private spending tends to be excessive, the government can moderate the inflationary pressure by reducing its own expenditure. But reduction or postponement of government expenditure in modern times is not an easy task. There may be projects already under construction and these obviously cannot be postponed. Similarly, other types of expenditure may be necessary to meet the normal requirements of the 'collective consumption' of the community—defence, police, justice, etc. Then, there may be social expenditures on education, health, etc., which are very difficult to cut because of undesirable political effects. Therefore, the major emphasis of fiscal policy in inflation has been on reducing private spending through increased taxation.

An increase in taxes tends to reduce private spending. If the rates of direct taxes on incomes and profits are raised, the private disposable income is reduced and this will tend to reduce private consumption spending. If the rates of commodity taxes are increased or fresh levies are made, the effect on consumption will be more immediate. An increase in the tax rates on a commodity will penalise spending directly by raising the cost of purchases.

Thus, in periods of inflation, the government should curb its own spending and increase the tax rates to reduce private spending. It is a good thing to plan for a budget surplus during inflationary periods.

**Summing Up.** Thus, the fiscal measures consist in (a) reduction of government spending, (b) imposition of new taxes or increasing the old ones to curtail the size of disposable income in the hands of the people and to reduce the magnitude of the inflationary gaps, (c) the encouragement of savings or introduction of compulsory saving schemes, (d) public debt management so as to reduce the money supply, (e) gold sterilisation as done in the United States, and (f) over-valuing domestic currency in terms of foreign currencies.

### Physical or Non-Monetary Measures

Apart from the monetary and fiscal measures, it becomes necessary also to resort to some measures of non-monetary nature. But it should be clearly understood that such measures are much less practicable than the monetary-fiscal ones. Several causes—psychological, institutional, technological and other non-economic causes—hinder the success of the non-monetary measures. Hence, full reliance cannot be placed on such measures. They can only be considered as supplementary to more effective measures.

The non-monetary measures, among others, include: (a) increasing output or increasing imports and decreasing exports so as to increase the available supply of goods in short supply, (b) controlling money wages to keep down costs and (c) price control and rationing.

In a symposium held in Bombay in February, 1975 on "Inflation, India and world economy," the problem of inflation was discussed at some depth. Mr. L.K. Jha, a former Governor of Reserve Bank of India, and Prof. J.K. Galbraith, a distinguished American economist and a former U.S. Ambassador in India, participated. Prof. Galbraith advocated a greatly reduced reliance on Central banks and monetary policies in meeting the current economic situation in which inflation and recession went hand in hand. It is necessary to recognise, he said, the impossibility of reducing consumption among people of average income or less, for restraints on income and consumption at the lower levels of the income period were possible only if the higher levels were restrained as well. He emphasised that wage increases which could not keep trade unions and white collar incomes within the capacity of the economy were self-defeating because they were taken away by price increases. As a balancing mechanism, he suggested that the aggregate demand be kept roughly equal to the supply of goods and services available at full-resource employment in the interest of price stability. For short-term adjustments, reliance should be on taxation—prompt, horizontal increases when aggregate demand exceeded supply and the reverse when it was deficient.

Mr. L.K. Jha said that there was need to increase investment in basic essential goods which were scarce and costly. He pleaded for a judicious use of regulatory instruments to achieve a shift in production from luxury goods to essential goods. Fiscal measures could be devised to curb the profitability of non essentials and make investment in essential goods more attractive. Excise duties, corporate taxation and industrial licensing for new capacity were instruments which could be used to achieve this objective. Curb on monetary expansion must be within the framework of continuous investment in



agriculture and in those industrial products which were major elements in fixing the cost of living. Curbs on credit and on budgetary outlays must, therefore, be selective and not quantitative. In India, a steady increase in the supply of basic necessities was a pre-requisite for price stability.

We discuss below the economics of price control because this is a widely used weapon to fight inflation.

### PRICE CONTROL

One method of preventing prices from rising is to impose price control on important commodities. This is an attempt to suppress inflation rather than to control it effectively. The basic pressures causing inflation remain as they were and the only thing that happens is that pressures will not be allowed to express themselves in the form of a rise in prices which are now deliberately sought to be controlled. Such a state of affairs is called **suppressed inflation**. The logic of economic analysis as well as historical facts amply proves that price controls by themselves are no solution of the inflationary pressures. During the war, all governments imposed price controls to check a rise in prices yet in all countries prices kept up their upward march.

**Failure of Price Control.** The reasons for relative ineffectiveness of price controls as an anti-inflationary measure are discussed below:—

(i) By merely controlling the prices, the government is tackling the symptoms rather than the basic causes of inflation. If the underlying pressure of demand is not allowed to express itself in the form of a rise in prices, it will express itself in the form of much longer queues of the potential purchasers. There will be a tendency for black-markets to flourish.

(ii) Further, to deal with now longer queues, the government will soon be forced to control the distribution of scarce commodities by some sort of rationing. Sooner or later, the controls will have to be extended to production also so that producers do not sell their output in the black-market. This ever-widening system of controls is liable to prove administratively costly as well as economically inefficient.

(iii) It is impossible to control prices of each and every commodity. Usually, the government will restrict itself to controlling the prices of only the important commodities. By so doing, the government is interfering with the normal working of price-mechanism. As we saw earlier, a rise in price of a commodity is a green signal to the producers to produce more. By artificially controlling the prices of the basic commodities, the government will be discouraging the movement of more resources into these urgent lines of production. On the other hand, if people cannot spend all their incomes on basic

necessities, they will shift their spending towards luxuries which are uncontrolled. Price of luxury goods will also rise and existing resources will be diverted from necessities to the production of luxuries. Thus, price controls lead to an inefficient and wasteful allocation of resources.

(iv) Lastly, there are technical difficulties of price fixation—what margin of profit should be allowed to the producers; should prices vary between the different parts of the country or should they be uniform; what should be the proper structure of relative prices, etc.? These are important questions to which it is difficult to find satisfactory answers.

**Conclusion.** For all these reasons, price control cannot by itself help to fight inflation effectively. This, however, does not mean that price controls have no place in the armoury of anti-inflation policies. They can provide the much-needed breathing space and hold the price line till more effective weapons go into action.

### FURTHER MEASURES TO CONTROL INFLATION

The following further measures for containing inflation may be mentioned.

**Price Income Policy.** Successive rounds of high wages resulting from trade union pressure is regarded as an important cause of inflation. This arises from the monopoly power of the unions. Since the trade unions would not agree only to wage freeze, a comprehensive approach is called for. That is, prices and profits will also have to be controlled to ensure workers' cooperation. Since wages are downwardly rigid and profits are already reduced by an all round increase in costs, the price-income policy cannot be effective in containing inflation.

**Monetarists' Recipe.** The monetarists hold that inflation can be controlled by regulating money supply combined with appropriate credit policy. They believe that wage-price spiralling can be checked by reducing the rate of monetary expansion below the money income level. In course of time, it is said people will try to restore their initial real balances by cutting consumption expenditure and raise the level of saving. This decline in aggregate expenditure will affect businessmen who may decide to keep the product prices steady. But output will be reduced and unemployment would increase. Or the product prices may be lowered to avoid accumulation of inventory of finished products. The level of profits would fall and there may be liquidity crisis. This would also cause increased unemployment which may undermine the power of the unions to demand higher wages. This is the main lever to reduce the rate of inflation. The wage-price spiral set in the reverse gear. The rate of inflation becomes in tune with the rate of monetary expansion. This is



how the economic system steers through the danger of excessive inflation or unemployment. It is reduction in money supply which initiated the process.

We see that the monetarist prescription rests on controlling the rate of monetary expansion and the resultant effect on expenditure. But the impact operates with a time lag. Hence direct management of demand through monetary and fiscal policy is recommended because it involves shorter time lags. Lowering of tax rates should be combined with tight control over money supply. It should also be associated with a reduction in public expenditure otherwise budgetary deficits would emerge and fan the inflationary fire. A reduction in the level of taxation would stimulate investment and reduce unemployment. In this way, aggregate demand can be kept in check, investment expenditure increased and the level of unemployment lowered.

**Indexation.** An effective supplementary device for controlling inflation is what has been called indexation. Economic variables are indexed to maintain the real value of variables which are measured in money units. The technique is to link a variable with a selected index e.g. wages may be linked to retail price index. The object is to prevent the erosion of real wages irrespective of changes in the price level. Similarly, the rate of interest can be

indexed so that positive rate of return on money can be protected in real terms. Tax system constitutes an important area of indexation so that the proportion of deducted earnings can be kept relatively constant over time.

**Conclusion.** One school of economists (monetarists and non-monetarists) holds that the root cause of inflation are the economic factors, viz., continued existence of excess demand. The other school (Sociological-institutional) lays emphasis on the non-economic factors as the basic cause of inflation. To the monetarists excess demand originates in the excess money supply which arises from fiscal deficits, behaviour of the banking system and balance of payments surpluses. Non-monetarists ascribe the continued excess demand to fiscal overspending and money supply is assigned a passive role. But monetarists and non-monetarists both agree on the techniques of containing inflation viz., the regulation of money supply, credit curbs, avoidance of fiscal deficits, funding of deficits by savings rather than by monetary expansion. The non-monetarists rely heavily on taxation and reduction of public expenditure. Both monetarists and non-monetarists recommend indexation of economic variables like wages, interest rates, profits and dividends. Price-and-income policy is also recommended to contain inflationary pressures.



# Part II

## Banking

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BANKING

### What is a Bank?

A bank is an institution which deals in money. Broadly speaking, banks draw surplus money from the people who are not using it at the time, and lend to those who are in a position to use it for productive purposes. Modern banks have developed from very small beginnings. The earlier bankers were goldsmiths.

Crowther observes that "the present-day banker has three ancestors: merchant, money-lender and goldsmith. A modern bank is something of each of these. It is said money has two properties. It is flat so that it can be piled up, and it is round so that it can circulate. The progeny of the money-lender are concerned with flat money, piled up money, savings. The progeny of the goldsmith are concerned with round money, circulating money, cash."<sup>1</sup>

### FUNCTIONS OF COMMERCIAL BANKS

Broadly speaking, there are three principal functions that banks (other than central banks) perform: (a) receiving deposits; (b) advancing loans; and (c) discounting bills.

(a) **Receiving Deposits.** This function is important, because banks mainly depend on the funds deposited with them by the public. Deposits are of three kinds: (i) current or demand deposits, (ii) fixed or time deposits, and (iii) savings deposits. On current or demand deposits, the bank pays practically no interest. They can be withdrawn in part or in full at any time by issuing a cheque. Fixed deposits are so called because they are left with the bank for a certain fixed period before the expiry of which they cannot be withdrawn except after giving due notice. On such deposits, the bank pays higher interest. Savings deposits can be withdrawn subject

to certain limitations regarding the amount withdrawn or the frequency of withdrawals. There is, for instance, a limit to total weekly withdrawals. Modern banks are now more liberal in this respect and have relaxed most of these restrictions.

In actual fact, only a small percentage of savings is withdrawn at any particular time. But since withdrawals can and do take place, the bank has to keep a certain proportion of its assets in liquid form. The rest can be lent for varying periods. This brings us to the second function of banks.

(b) **Advancing Loans.** In this respect, the banker has to shoulder a heavy responsibility. The bank makes profit by advancing loans. But the bank deals in other people's money. It has, therefore, to keep ready cash to meet the depositors' demands. Hence, great care has to be exercised in the matter of lending and keeping reserves. The bank must strike a fine balance between liquidity and profitability. If it keeps its assets in too liquid a form, it loses profit, and, if it tries to make too much profit, it may not be able to meet the depositors' demands. It must aim at both liquidity and profitability.

It should be noted that the bank does not merely lend funds actually deposited with it by its clients. The bank can itself create deposits and thus make advances considerably in excess of the sums deposited with it. After satisfying itself that the purpose for which the loan is required is economically sound and after taking precautions as regards security, the bank gives its client the right to draw cheques. The loan thus becomes a deposit to the credit of the customer concerned. If the customer, by a cheque or a series of cheques, withdraws this amount, the payment is made to somebody. These cheques, in their turn, come back either to the same bank or to other banks of the country or locality. They appear as deposits in the credit of the various people to whom the payments were made. Thus, it is that "loans create deposits." That is why it is said that in

1. *An Outline of Money*, 1950, pp. 24-25.



modern times, deposits of cash have changed into deposits of credit.

(c) **Discounting Bills.** Discounting of bills is, practically speaking, lending for short periods. A trader, for instance, who does not wish to lock up large funds in trade credits, may draw a bill of exchange on his debtor, and, after it has been accepted by, or on behalf of, the debtor, he may get it discounted by his banker. This gives the trader immediate possession of the money due to him less a deduction for the loss of interest and for the commission to the bank. These bills are usually for three months, and when they mature, the bank realises the face value of the bills. Thus, the bank earns a profit in addition to facilitating trade. These bills mature after short periods, and if the worst happens, they can be rediscounted at the central bank.

This is a common way of keeping a part of the assets of the bank in a liquid form. The bankers regard discounting of bills as a very good investment. That is why it is remarked that a good bank manager knows the difference between a bill and a mortgage. In modern times, trade bills occupy a very small position in the discount market as compared with Treasury Bills.

**Summing Up.** The main functions of the banks can be summed up in one sentence: **The banks borrow to lend.** They borrow in the form of deposits, viz., (a) Fixed Deposits, (b) Savings Bank Deposits, and (c) Current Deposits in Accounts. The banks lend in three ways: (a) on open account or overdraft; (b) loans on the cash credit basis; and (c) discounting of bills.

**The banks borrow short and lend long.** Their liabilities mature earlier than their loans. Their liabilities are money and their assets partly money and partly near-money. The interest they have to pay on their liabilities is, therefore, less than what they earn on their assets. "The nearer to money that near-money is, the lower is the income it will yield. The further away from money the higher is the yield."<sup>2</sup>

**Other Services.** Apart from the above main functions, the banks perform a number of other services for the clients: They help in the transfer of funds from one place to another and from one person to another through the use of cheques. Some banks accept bills on behalf of their clients and thus make them more easily negotiable. They also supply information and advice to their clients on matters relating to investment. In addition, they perform miscellaneous services like taking charge of valuations and securities, acting as agents, trustees and bailees of their customers, purchasing and selling stocks and shares on their behalf, and making sundry payments on behalf of their customers, e.g.,

paying rent, insurance premium, subscriptions to clubs and charitable institutions at regular intervals, etc.

## CREATION OF CREDIT

Creation of credit is one of the most important functions of a modern bank. A bank has sometimes been called a factory for the manufacture of credit. Let us see what we mean by credit creation. How it is created by the banks and, finally, whether the power of the banks to create credit is absolute and unlimited or whether it is subject to certain limitations.

### How Banks Create Credit

Banks create credit in two ways:

- (i) By advancing loans.
- (ii) By purchasing securities.

A bank deposit is created entirely by the banking system. Every advance made by the bank creates a corresponding deposit. In fact, the two things happen simultaneously. The granting of a loan results in creation of deposit.

It is an open secret that the banks do not keep cent per cent reserve against deposits in order to meet the demands of depositors. **The bank is not a cloak room** where you can keep your currency notes or coins and claim those very notes or coins back when you desire. It is generally understood that deposits received by the bank are meant to be advanced to others. A depositor has to be content simply with the bank's promise or undertaking to pay him whenever he makes a demand. Thus the banks are able to do with a very small reserve, because all the depositors do not come to withdraw money simultaneously; some withdraw, while others deposit at the same time.

Thus, the bank is enabled to erect a vast superstructure of credit on the basis of a small cash reserve. The bank is able to lend money and charge interest without parting with cash. The bank loan creates a deposit, as we have seen above, or it creates a credit for the borrower.

Similarly, the bank buys securities and pays the seller with its own cheque which again is no cash; it is just a promise to pay cash. The cheque is deposited in some bank and a deposit is created or credit is created for the seller of the securities. This is credit creation. Also, when a bank discounts a bill of exchange, it is seldom that the amount is paid in cash; instead the customer's account is credited with the amount. This is creating credit.

Thus, every time that a bank acquires an earning asset whether by advances or investments, it creates a deposit (or credit) in the name of the person or institution from whom the asset has been acquired.

The term 'credit creation' implies a situation, to use Benham's words, when "a bank may receive

<sup>2</sup> Crowther, G.—*An Outline of Money*, 1950, p. 66.



interest simply by permitting customers to overdraw their accounts or by purchasing securities and paying for them with its own cheques, thus increasing the total bank deposits." 3

### Process of Credit Creation

Let us see the actual process. Suppose a customer deposits Rs. 1,000 in a bank. The bank has to pay him interest; therefore, the bank must seek a safe and profitable investment for this amount. It must lend it to somebody. But this amount is not actually paid out to the borrower; on the other hand, it is retained by the bank to meet its obligations, i.e., to pay to those of its depositors who need cash and draw cheques for the purpose. The banker's experience tells him that for this purpose only a certain percentage of cash reserve to total liabilities need be kept. In countries like England, they keep nearly 10 per cent. The ratio of cash to liabilities is much higher in countries like India, where banking habit has not yet fully developed.

Suppose the bank, in which a depositor has deposited Rs. 1,000, keeps 20 per cent cash reserve to meet the demands of depositors. This means that as soon as the bank has received Rs. 1,000, it will make up its mind to advance loans up to the amount of Rs. 5,000 (only one-fifth reserve is kept). When, therefore, a businessman comes to the bank with a request for a loan of Rs. 5,000, he may be sure of being granted accommodation to this extent, provided, of course, his credit is good. The bank would have liabilities of Rs. 5,000, although it has only Rs. 1,000 in cash. It is here that credit comes in.

This transaction is rendered possible, because the borrower is not given the loan in cash; only an account is opened in his name and/or the amount is credited to that account. He is simply given a cheque book, i.e., the right to draw cheques as and when he needs money. Even when he withdraws cash, it may be deposited in another bank, for businessmen do not raise funds to keep them locked up in a cash box but to run their business and to make payments to their creditors. When this particular businessman draws cheques on this bank to pay his creditors, these cheques are passed on by them to their own banks; where the amount is deposited in their accounts. Cash is seldom withdrawn. The banks settle their mutual obligations through a system of bank clearing. Thus, the bank has succeeded in creating a credit of Rs. 5,000 against a cash reserve of Rs. 1,000.

But the process of credit creation does not stop here. The banks generally keep their spare cash into the central bank. A portion of Rs. 1,000, therefore, is deposited in the central bank which in its turn uses it as a basis for similarly creating further credit. Just as the banks go on creating credit (i.e., advancing loans

on cash credit) all the time relying on their cash balances with the central bank, in the same manner the branch banks go on accommodating their local customers relying on the resources of the head office. The movement of credit creation thus goes apace. This is one way of creating credit.

The second way of creating credit is very simple. The bank can purchase securities without paying any cash. It issues its own cheque to pay the purchase price. The cheque is deposited in this bank or some other bank and the small cash reserve which the bank keeps is sufficient to meet the obligation arising from this transaction too.

It is thus that, on a small cash foundation, a vast superstructure of credit is built up.

### Limitations

From the account of credit creation given above, it would seem that **'the banks reap where they have not sown.'** They advance loans or buy securities without actually paying cash. But they earn interest on the loans they give or earn dividends on the securities they purchase all the same. This is very tempting. They make profits without investing cash. They would, of course, like to make as much profits like this as they can. But they cannot go on expanding credit indefinitely. In their own interest, they have to apply the brake, and they do actually apply it, for it is well known that the profits made by the banks are not very high. **The overriding limitation arises from the obligation of the banks to meet the demands of their depositors.**

Benham has mentioned three limitations on the powers of the banks to create credit:

- (i) The total amount of cash in the country;
- (ii) The amount of cash which the public wishes to hold, i.e., the ratio in which the public wishes to hold bank notes and bank deposits; and
- (iii) The minimum percentage of cash to deposits which the banks consider safe, i.e., the reserve ratio.

As for (i) it may be said that credit can be created only on the basis of cash. The larger the cash (i.e., legal tender money) the larger the amount of credit that can be created assuming no change in (ii). But the amount of cash that a bank may have is subject to the control of the central bank or it depends on the monetary policy of the Central bank. We shall study this influence in full in the next chapter. Here it may suffice to say that the central bank has the monopoly of issue of cash. It may increase it or decrease it, and credit will expand or contract accordingly. The Central bank can also influence the amount of cash in the country through open market operations (to be discussed later). It can increase cash with the commercial banks by purchasing securities and reduce it by selling securities. Thus, the power of the central bank to control currency is the controlling influence on the extent of credit that the banks can create.



The second limitation arises from the habit of the people regarding the use of cash. If people are in the habit of using cash and not cheques, as in India, then as soon as credit is sanctioned by the bank to a borrower, he will draw a cheque and get cash. When the bank's cash reserve is thus reduced, its power to create credit is correspondingly reduced. On the other hand, if people use cash only for very small and odd transactions, then the cash reserve of the banks is not much drawn upon, and their power of creating credit remains unimpaired. This is the case in advanced countries like the U.S.A., the U.K. and other European countries. There the banks hardly keep 10 per cent cash reserve.

The third limitation is the most important. It arises from the traditional reserve ratio of cash to liabilities, which the banks must maintain to ensure their safety and to retain the degree of liquidity that is considered desirable. It is clear that when a bank creates a credit or sanctions a loan, it undertakes a liability. There is an increase in its liabilities and there is correspondingly a fall in the reserve ratio. The bank will not let the ratio fall below a certain minimum. When that minimum is reached, the power of the bank to create further credit comes to an end. To grant any further credit will be risky unless the bank's experience is reassuring enough to permit the adoption of a lower cash ratio. Then that would be the limit.

To these may be added the fourth limitation. The bank cannot create credit without acquiring assets (in this case the borrower's promise to pay on some security). An asset is a form of wealth. Thus, the bank only turns immobile wealth into mobile wealth. Hence, as Crowther observes, "**the bank does not create money out of thin air, it transmutes other forms of wealth into money.**"<sup>4</sup>

**To Sum Up:** The essential conditions for the creation of credit are that the banks obtain fresh cash reserves, they should be willing to lend and the businessmen should be willing to borrow, and the borrowers should not withdraw the amount of the loan but be content to leave it in the form of deposit with the bank. The initiative is in the hands of the borrowers. The deposit is, in fact, created not by the amount borrowed but by the amount not withdrawn.

### Significance of Credit Creation

Credit creation vitally affects the level of economic activity (and hence national income, output and employment) in the country. It is no wonder that the policy pursued by the monetary authority in the country is directed to the control of credit expansion or contraction. Left to itself, credit expansion or contraction may 'boom the booms' and 'depress the depressions.' Thus, credit creation has a lot to do with the cyclical fluctuations in the economy.

In the case of under-developed economies, credit creation has to be controlled to ensure economic growth with stability. It can be easily understood that when credit is unduly created, prices rise and wages rise along with. Inflationary situation is inimical to economic growth. Similarly, credit contraction is injurious, as it slows down economic growth because entrepreneurs are deprived of the necessary funds. Hence, the monetary authority pursues a policy of controlled expansion of credit to ensure growth with stability.

Thus, since money supply in the country depends on the volume of credit created, credit creation plays a vital role in determining the level of national income and volume of employment in the country.

### Investment Policy: Liquidity vs. Profitability

A bank exists to make profit. Its investment policy is, therefore, mainly governed by the profit motive. But a bank is a very sensitive institution and must always keep in view its own security. 'Safety first' is the rule and subject to this, the bank must try to make maximum profit. Thus, profitability and safety (*i.e.*, liquidity) are the two considerations governing a bank's investment, although it is not easy to reconcile them.

If the bank management is more keen on making profits, it may invest its funds in lines which are highly remunerative but which may not be converted into cash quickly when the need arises. On the other hand, if the bank is swayed only by safety considerations, it may not earn much profit because safe investments are generally not very remunerative.

The secret of sound banking consists in the maintenance of adequate reserves, while at the same time making profits. A bank, we have seen, deals with other people's money (*i.e.*, deposits) and the money can be withdrawn with or without notice. They must, therefore, maintain adequate reserves to meet this demand and make profit by lending the rest. A wise banker must maintain a proper balance between liquidity and profitability. Too much caution will mean too little profit, while reckless lending may endanger the safety of the bank itself.

The liquidity and profitability are opposing considerations. There has to be a compromise, but it is an uneasy compromise. Because whatever the form and quantity in which the banks keep their reserve, they are found to be unnecessary in normal times and insufficient when the depositors' confidence is shaken.

In order to ensure liquidity for their own safety, a bank must keep adequate reserve. The amount of reserve kept by a bank is governed, among others, by three factors<sup>5</sup>: (a) day-to-day fluctuation in the amount of bank's deposits; (b) the variability of the

4. *Op. cit.*, p. 30.

5. Kilborne and Woodworth—*Principles of Money and Banking*, 1937, p. 291.



customers' borrowing needs; and (c) the nature of secondary reserves, and the character of reserve organisation in the banking system.

**Importance of Liquidity.** The proportion in which the various forms of assets are kept vary from country to country, from bank to bank, and vary also with the state of trade. The larger the 'liquidity' of the assets, the more confidence will a bank inspire, but the lower will be its profits.

The whole banking business rests on the confidence of the people in the ability of the bank to pay their money back on demand. If such confidence is shaken for any reason, there is a 'run' on the bank. No bank can face a run because all the assets of the bank are not in liquid form.

Banking business is said to be a 'fair weather' business. So long as the skies are sunny, *i.e.*, so long as the depositors are happy with the bank and nobody wants to withdraw his money, the bank says, "Anybody can have his money back." But as soon as the skies are overcast and the depositors get nervous and all depositors wish to take out their money, then none can have it. If there is only a single patch of colour on the sky, *i.e.*, if only one bank is involved in a run, it may perhaps be able to meet its liabilities by converting its assets into cash. But if the whole atmosphere is gloomy, and there is a general panic, depositors of all banks will have to go disappointed.

Thus, it is necessary for a bank not only to keep a certain proportion of its assets liquid, but also to see that people's confidence in its soundness is not shaken. Bankers must take into account a certain degree of proclivity on the part of the depositors. When they know they can have their money back, they do not have it, and as soon as they suspect they cannot have it, they insist on having it. The best way to inspire confidence is freely to give credits in times of panic. Central banks also come to the help of other banks on such occasions.

### Bank Balance Sheet

To keep the people informed of their financial position, the banks are required by law to publish their accounts in the form of what is called a "Balance Sheet". A bank's balance sheet is a statement of its financial position. Usually such a statement is issued at the end of the financial year. The central bank, however, issues it weekly. The balance sheet is a mirror that reflects the financial position of the bank.

The balance sheet consists of two columns. The column on the left hand side gives the liabilities of the bank. The liabilities include capital and Reserve Fund which the bank owes to the shareholders. Then there are deposits which belong to the depositors and the bank is liable to meet their demands. On the right side of the bank balance sheet are given the assets, *e.g.*, cash in hand, cash at the central

bank, money lent at call, bills discounted for which the persons whose bills have been discounted are liable, and finally furniture and other property that the bank owns.

The Bank Balance Sheet is usually given in the following form:—

| <i>Liabilities</i>       | <i>Assets</i>  |
|--------------------------|--|
| Capital                  | Cash   |
| Reserve Fund             | Cash at Central Bank   |
| Deposits                 | Money at Call  |
| Acceptance for Customers | Bills discounted   |
| <i>(as per contra)</i>   | Investments  |
|                          | Liabilities of Customers for Acceptance <i>(as per contra)</i> |
|                          | Furniture and Fittings   |
|                          | Premises and other Property                                    |

Usually a bank keeps its assets in descending order of liquidity or realisability into cash. Its first line of defence, as the term goes, is to maintain a certain amount in ready cash. This cash is kept either in the form of coins or in the form of currency notes or as a balance with the central bank.

The balance with the central bank can always be withdrawn in the form of legal tender currency. The banks thus treat such balance as cash. All major banks, either by law or by convention, keep a certain proportion of their liabilities in the form of balances with the central bank of the country. It may be incidentally mentioned that the existence of such balances gives the central bank a power over other banks of the country in the matter of controlling the credit expansion by the latter.

The second line of defence in maintaining reserves is the money lent for very short periods, technically called in England money 'at call and at short notice.' This is mainly lent to discount houses, bill brokers and petty stock brokers. Such loans can be recalled either on demand or within a few days.

After this come the bills discounted. These become liquid as they mature. These may be Treasury Bills issued by the Government or commercial bills.

Then come investments. These are mainly government securities. The fixed interest-yielding securities also called "gilt-edged" securities in England, are most popular with the banks, since there is practically no risk in such investments.

Then come advances to customers. They may take the form of loans or overdrafts. They bring the highest profits, though the risk is the greatest in their case, since they are the least liquid.

In the balance-sheet, the banks are anxious to show that their position is very sound. This they can do by keeping a big cash reserve or higher ratio of



reserve to liabilities. For this purpose, they call back, on the eve of the preparation of the balance sheet, the amounts lent on call or at short notice on the understanding, that they may be re-lent the next day. These efforts at putting up a good show are called "window dressing".

#### Utility of Banks

It should be clear by this time that the banks are extremely useful, nay indispensable, for a modern community. "Bankers are the custodians and distributors of the liquid capital, which is the life-blood of our commercial and industrial activities; and upon the prudence of their administration depends the economic well-being of the nation."<sup>6</sup> More concretely we may summarise the uses of banks as follows:

- (i) The banks create purchasing power in the form of bank notes (e.g., central bank currency notes) cheques, bills and drafts and thus economise the use of metallic money which is very expensive.
- (ii) They make money more mobile, by bringing lenders and borrowers together, and by helping funds to move from place to place and from person to person in a convenient and inexpensive manner, through the use of cheques, bills and drafts. In this way, they help trade and industry.
- (iii) The banks encourage the habit of saving among the people and enable small savings, which otherwise would have been scattered ineffectively, to be accumulated into large funds and thus made available for investments of various kinds. In this way, they promote economic development through capital formation.
- (iv) By encouraging savings and investment, the banks increase the productivity of the resources of the country and thus contribute to general prosperity and welfare by promoting economic development.
- (v) The bank's agency functions are very useful to the customers of the bank. They undertake to make petty payments of various kinds on behalf of their customers and also make several types of collections on their behalf.

Thus, the banks are useful not only to the community in general but also to the individual customers.

There are special functions of very great importance that are performed by the central bank of a country to the study of which we shall direct our attention in the next chapter.

#### Role of Banks in Economic Development

Banks play a vital role in economic development of under-developed economies in several ways:

- (i) **Banks Promote Capital Formation.** In any

plan of economic development, capital occupies a position of crucial and strategic importance. No economic development of sizable magnitude is possible unless there is an adequate degree of capital formation in the country. A very important trait of an under developed economy is deficiency of capital which is due to small saving made by the community. Backward economies hardly save 5 per cent of the national income, whereas they should save and invest at least 12 per cent in order to secure a reasonable level of development. In 1950, Colin Clark estimating the capital needs of China, India and Pakistan pointed out that they must save 12.5 per cent of the national income to absorb the increasing labour force and maintain the past rate of increase in productivity.

In the under-developed countries, not only is the capital stock extremely small but, as pointed out above, the current rate of capital formation is also very low. For example, in India and Pakistan, gross investment is only 6-7 per cent of gross national product and in Indonesia only 5 per cent, whereas in the United States, Canada and Western Europe it is 15-18 per cent. A small rate of saving (5-6 per cent) does not permit large investment in new industries. In fact, in economically backward countries, the amount of net capital formation is hardly sufficient to provide the growing population with a constant per capita equipment. Thus, the serious capital deficiency in under-developed countries is reflected in the small amount of capital equipment per worker and in limited knowledge, training and scientific advance. These are serious handicaps in economic development and they all arise from capital deficiency and the banks can play a useful role in making up the deficiency.

The role of the banks in economic development is to remove the deficiency of capital by stimulating savings and investment. A sound banking system mobilises the small and scattered savings of the people and makes them available for investment in productive enterprises. In this connection, the banks perform two important functions: (a) they attract deposits by offering attractive rates of interest, thus converting savings which otherwise would have remained inert into active capital, and (b) they distribute these savings through loans among enterprises which are connected with economic development.

- (ii) **Optimum Utilisation of Resources.** It is difficult to see how, in the absence of banks, could small savings of the people be mobilised or even made possible. It is also difficult to see who would distribute these savings among entrepreneurs. It is through the agency of the banks that the community's savings automatically flow into channels which are productive. The banks exercise a degree of discrimination which not only ensures their own safety but which makes for optimum utilisation of

<sup>6</sup> Stephenson and Branton—*Economics of Banking Trade and Finance*, p. 180.



the financial resources of the community. We see in India that the period of economic development has coincided with a phenomenal increase in bank deposits and increasing advances for agricultural and industrial development.

(iii) **Banks Finance Priority Sectors.** In order to meet additional demands arising out of economic development, the banking system has to undergo certain changes in its structure and organisation. The banks and other financial institutions must operate in such a manner as to conform to the priorities of development and not in terms of return on their capital. The banks have now to play a more positive role. Thus, the central bank is not merely to content itself with its regulatory role, *i.e.*, regulation of bank credit. It must play a developmental role. It must create or help to create a machinery or agencies for financing development plans. It must ensure that the available finance is diverted to the right channels. For successful implementation of the development programmes it becomes necessary to make credit facilities available to high priority sectors and to see that the available funds are not squandered a way in non-essential or non-plan expenditure.

(iv) **Banks Promote Balanced Regional Development.** By opening branches in backward areas, the banks make credit facilities available there. Also, the funds collected in developed regions through deposits may be channelised for investment in the under-developed regions of the country. In this way, they bring about more balanced regional development.

(v) **Expansion of Credit.** It is recognised that to maintain a high level of economic activity, credit must expand. In an era of economic development, banks create credit more liberally and thus make funds available for the development projects. In this way, the banks make a valuable contribution to the speed and the level of economic development in the country.

(vi) **Banks Promote Growth with Stability.** Through their influence on the rate of interest, the banks can regulate the rate of investment. If cheap money is helping development at too great a speed, they will raise interest rates under the direction of the central bank. On the other hand, they can encourage investment when the speed of development has slowed down. In this way, the banks promote growth with stability.

In India, the primary function of the Reserve Bank of India was to regulate the issue of bank notes and keep adequate reserves to ensure monetary stability. But now it has assumed wider responsibility to help in the task of economic development. In addition to the traditional responsibility of regulating currency and controlling credit, the Reserve Bank of India has been playing a vital role in financing and supervision of the development

programmes for agriculture, trade, transport and industry. It has created special funds for promoting agricultural credit and it has created special institutions for widening facilities for industrial finance. The other banks too readily fall in line. They open new branches to tap the savings of the people and lend them to entrepreneurs. An increasing degree of control is exercised in respect of management, financing and development of banks so that they do not sabotage the development programmes but are made to further these programmes.

**Conclusion.** Thus, the banks come to play a dominant and useful role in promoting economic development by mobilising the financial resources of the community and by making them flow into desired channels.

#### A NOTE ON NON-BANKING FINANCIAL INTERMEDIARIES (NBFIs)

We have studied banks and their functions. Besides the banks there are other financial institutions too which practically perform the same functions (e.g. deposit mobilisation and advancing loans) as the banks but in a different way. These are the non-banking financial institutions.

**Meaning.** The NBFIs are just intermediaries or middlemen transferring funds from ultimate lenders to ultimate borrowers. The financial intermediaries obtain funds by issuing to the public their own liabilities (e.g. saving deposits and loan shares) and then use this money to buy financial assets (stocks, bonds and mortgages) for themselves. In this way, the financial intermediaries 'intermediate' between original savers and final borrowers.

#### Functions of the NBFIs

The following are the main functions performed by the NBFIs:-

(i) They produce and provide near money and not money.

(ii) They provide liquid assets to the community, because their liabilities are close substitutes for money.

(iii) They pass on savings to ultimate investors and issue indirect securities to the ultimate savers in return for savings.

(iv) They create loanable funds or add to their net supply by mobilising existing money balances in exchange for their own newly issued financial claims or liabilities.



### Importance of Central Bank

Now every country has a central bank. It is a symbol of financial sovereignty and stability of the country. (A central bank is an institution which is responsible for safeguarding the financial stability of the country) It holds the ultimate reserves of the nation, controls the flow of purchasing power—whether currency or credit—and acts as a banker to the State.

In recent years, the importance of central banks has enormously increased. This has been due to various causes: the growing interdependence of economic life within and between countries; the greater necessity of management and control of currency system; the post-war (1914-18) confusion in currency and exchange matters; the Great Depression and the realisation that control over supply of money through central banks could avoid to a large degree cyclical fluctuations; and the element of planning and regulation that has been introduced in the economic systems of various countries in recent years. All these have increased the importance of an institution which could co-ordinate, control and manage the various complicated and conflicting factors, economic and financial, which affect the economic stability in the national and international field.

### CENTRAL BANKING PRINCIPLES

The principles on which a central bank is run are quite different from the ordinary banking principles:

(i) An ordinary bank is run for profit. A central bank, on the other hand, is primarily meant to shoulder the responsibility of safeguarding the financial and economic stability of the country. "The guiding principle of a central bank," says De Kock, "is that it should act only in the public interest and for the

welfare of the country as a whole and without regard to profit as primary consideration." Earning of profit for a central bank is thus a secondary consideration.

(ii) Since the central bank is not a profit or dividend-hunting institution, it does not act as a rival of other banking institutions. That is why it seldom allows interest on deposits nor can it advance money against the security of immovable property or grant unsecured overdrafts. It is primarily concerned with the maintenance of the solvency of the entire banking system of the country. It must, therefore, keep its own assets as liquid as possible.

(iii) The central bank is a reservoir of credit and a lender of last resort. All other banks and financial houses can look to it for accommodation, of course, at a price. But the central bank cannot rely on any other institution to come to its aid and give it cash or take bills and securities off its hands.

(iv) The central bank must follow an active policy. It should not be merely an idle spectator when something goes wrong with the credit machinery of the nation. It must take active steps to remedy the situation. For this purpose, it may resort to two weapons: (a) the manipulation of the bank rate policy; (b) the open market operations. Their working is explained in the sections below. It may also adopt other measures of credit control, general or selective credit controls.

(v) For the efficient discharge of its functions, the central bank is provided with special equipment: (a) It is given the monopoly of the note issue. (b) It is made a banker to the government. (c) It is a bankers' bank. With the position so acquired, it can effectively control currency and credit, and this control is the *raison d'être* of a central bank.

(vi) Finally, a central bank should not be subservient to any political party. It must be independent

#### 1. Central Banking.



of all political influence, so that it can act freely, without fear or favour, in the best interests of the nation as a whole. However, there is usually very close co-operation between the government and the bank.

### FUNCTIONS OF CENTRAL BANKS

What functions are more characteristically the central banking functions has been a widely discussed question among economists. Hawtrey thinks that it should primarily be the "lender of last resort." Vera Smith stresses the monopoly of note issue and Shaw regards control of credit as "the one true, but at the same time all sufficing, function of a central bank." Kisch and Elkins<sup>2</sup> regard "the maintenance of the stability of the monetary standard" as the essential function of a central bank. It is, however, difficult to single out any particular function as characteristic of a central bank.

Broadly put, a central bank acts in the following capacities:—

- (i) As the note-issuing agency;
- (ii) as the banker to the State;
- (iii) as the bankers' bank;
- (iv) as the guardian of the money market, through control of credit;
- (v) as the lender of last resort;
- (vi) it undertakes to maintain the external value of the domestic currency;
- (vii) it ensures the stability of the internal value of the currency, *i.e.*, the price level;
- (viii) it undertakes exchange control operations, &
- (ix) it fights economic crises and fluctuations and ensures economic stability of the country.

Above are given what are known as the traditional functions of a Central Bank. In the advanced countries of the West, it is these functions which their central banks have been performing. Largely these functions are regulatory in nature. In the under-developed countries, however, whose main concern is to accelerate development of their economic potentialities, the Central Banks have a special role to play, which is not merely regulatory to maintain stability, but developmental and promotional. This latter role is discussed at length in the last section of the present chapter.

We shall now proceed to consider some of these functions in some detail.

#### Note-Issuing Agency

In the early periods of banking development, almost every bank enjoyed the right of issuing notes. This led to frequent troubles. Notes were over-issued and the resulting inflation disorganized the

currency system and brought other serious economic and financial consequences. The government, therefore, had to exercise strict control over the issuing of notes. Gradually, the practice of entrusting this important function to the chief bank of the country, the central bank, became established. Now, in almost every country, the central bank enjoys a monopoly of note issue. Such a monopoly is of great importance. It gives uniformity to the system of note-issue. Moreover, the notes of a central bank have greater prestige and even in times of shaken confidence, are seldom presented for encashment into coins or metal. Above all, this monopoly gives the central bank control over other banks in the matter of expansion of credit, since it is the cash reserve which constitutes the ultimate limit of such expansion.

(The various systems of note-issue have already been given in Chapter 49).

#### Banker of the State

The second important function of a central bank is to act as a banker to the government. **All the balances of the government of the country are kept with the central bank.** On these balances, usually the central bank pays no interest. On the other hand, the bank performs a number of services to the government. Generally speaking, it is the fiscal agent of the government, and advises the latter in matters relating to currency and exchange as well as finance. It carries out their exchange, remittance and other bank operations including the management of public debt. "Central banks everywhere operate as bankers to the State not only because it may be more convenient and economical to the State, but also because of the intimate connection between public finance and monetary affairs."

An important function of the central bank with respect to the State is the **provision of short-term loans.** This is usually done through the central bank discounting the government treasury bills either directly or when presented by other banks. This is to enable the government to meet its current financial obligations in anticipation of its revenues.

During times of crisis like a war, such lending to the government can lead to serious inflation as happened in the case of France, Germany and elsewhere in Europe during and after the war of 1914-18. "History is full of examples," says De Kock, "of inflation and currency depreciation resulting from credit creation on behalf of the State. In fact, experience has shown that heavy government borrowing either directly from the central bank or indirectly through rediscount, is the easiest means, and sometimes the only means, of bringing about substantial inflation."<sup>3</sup>

When a central bank gives advances to the

2. *Central Banks*, p. 74.

3. De Kock—*Op. cit.*, p. 64.



government against treasury bills or other government securities, the money spent by government is again deposited with commercial banks by those who receive payments. This, in fact, means an increase in the commercial banks' balances with the central bank which, as we have seen, are as good as cash. On the basis of this cash, the commercial banks are able to increase their loans and advances. Thus, inflation starts.

### Bankers' Bank

Broadly speaking, the central bank acts as a bankers' bank in three capacities: (i) As the custodian of the cash reserves of the commercial banks; (ii) as the lender of last resort; and (iii) as a bank of central clearance, settlement and transfers.

(i) **Custodian of the Cash Reserves of Commercial Banks.** The practice of the commercial banks of keeping their cash reserves with the central bank developed slowly and it has been closely associated with the functions of the central banks as the bank of issue and as banker to the government. It was convenient to keep cash reserves with the central bank, because its notes commanded the greatest confidence, and also because government's banking transactions took place through this institution. Originally, keeping of cash with the central bank was optional; later on, in most countries, it was made a statutory obligation.

The practice has many advantages: First, it economises cash. The nation's cash can be more effectively used when centralised than when scattered in the vaults of numerous banks. Secondly, it enables commercial banks to increase their reserves merely by discounting bills with the central bank in times of need instead of having to rely upon their own resources. Thirdly, it gives the central bank control over the credit policies of the member-banks as we shall presently see.

(ii) **Lender of Last Resort.** The central bank is the lender of last resort to the commercial banks. When the commercial banks have exhausted their own resources and have failed to supplement their funds from the usual outside resources, the central bank is called upon to function as the lender of last resort. It acts in this capacity mainly through its rediscount operations.

In the narrow sense, rediscounting is applied only to first class trade and agricultural bills brought to the central bank by commercial banks and bill dealers or brokers, who are temporarily in need of funds and want to convert some of their short-term assets into cash. In the wider sense, as now current in most countries, rediscounting is defined as "the conversion directly or indirectly of commercial bank credit into additional central bank credit."<sup>4</sup> Redis-

counting is thus applied also to treasury bills and to short-term collateral loans to banks and other financial institutions made by the central bank against bills or promissory notes and government securities.

Rediscounting facility enables commercial banks to carry on their day-to-day business on smaller cash reserves, since they can always rely upon the central bank in times of crisis. It gives increased elasticity and liquidity to the assets of the commercial banks.

Rediscounting, however, should not be abused. It should be resorted to only in times of emergencies and not in times of normal business activity. The central bank, in its turn, should be ready to help in times of distress, but should be less liberal in ordinary times. This is necessary to encourage self-reliance among commercial banks and to conserve the strength of the central bank for emergencies.

(iii) **Clearing and Settlement.** The central clearing function is performed by all central banks. In some countries, it is merely a matter of tradition or convenience, in others it is a duty imposed upon the central bank by law. This is a logical step from the position of the bank as custodian of cash reserves of the commercial banks. Since banks keep cash reserves with the central bank, settlements between them can be easily effected by means of debits and credits in the books of the central bank. In some countries, separate clearing houses are set up to settle mutual obligations between the banks, including the central bank. In such countries, the balances ultimately to be paid can be paid without cash transfers through mere book entries in the accounts of commercial banks with the central bank.

This method of settling accounts, apart from being convenient, is economical as regards the use of cash. It also strengthens the banking system by reducing withdrawals of cash in times of crises. Moreover, it enables the central bank to be well informed about the state of liquidity being maintained by the commercial banks with regard to their assets. This information helps the central bank in its function of controlling the credit expansion in the country.

### Credit Control

The most important function of the central bank is the control of credit. The control of credit means the regulation and control of bank advances. It goes without saying that the nature and volume of bank advances have a vital bearing on the state of the economy. There is a time when trade and industry need finance, whereas the banks may feel shy. The central bank must step in to stimulate bank advances. At other times, the banks' lending may assume undesirable proportions or they may be flowing into undesirable channels. It is the duty of the central bank to curb these undesirable tenden-

4. De Kock—*Op. cit.*, p. 106.



cies by regulating and controlling credit creation by banks.

In view of the great importance of the control of credit, we discuss it below at some length.

## CONTROL OF CREDIT

### Objectives of Credit Control

A central bank controls credit with the following objects in view:—

- (a) To safeguard its gold reserves against internal and external drains;
- (b) to maintain stability of internal prices;
- (c) to achieve stability of foreign exchanges;
- (d) to eliminate fluctuations in output and employment; and
- (e) to assist in economic growth.

This assistance is required not only in under-developed countries desirous of accelerating economic development but also in developed countries desirous of maintaining and improving their living standards.

Now a word about each.

**Safeguarding Gold Reserves.** The necessity of safeguarding gold reserves arises under a gold standard. In a gold standard country, gold can be freely imported and exported as the currency of the country is convertible by law into gold coin or gold bullion. In such a country, an over-expansion of credit causes inflation. High prices at home first lead to withdrawal of more cash from the banks and then gold from the central bank to carry on transactions at a higher level. This is called the "internal drain."

Secondly, the home price-level being higher than the international price-level, imports are encouraged and exports discouraged. An unfavourable balance of trade is created which has to be met by export of gold. This is called the "external drain."

Gold may also move out because the foreign investors have lost confidence in the future of the currency under question and they begin to withdraw their funds.

In these circumstances, the central bank must take steps to contract credit, bring prices down and stop the internal and external drain of gold.

Now no country is on a gold standard and movement of gold is generally banned. It is now the duty of the central bank to safeguard the foreign exchange reserves of the country.

**Price Stability.** Another object of credit control is to maintain stability of internal prices. We have already referred to the various disadvantages of fluctuating prices. Price instability causes disturbances in economic relations, maladjustments and serious social consequences. The central bank by regulating the supply of purchasing power, according to the needs of the people, can reduce economic fluctuations to a large extent.

**External Stability.** In the interest of smooth flow of international trade and for settlement of international obligations, stability of foreign exchange rates is essential. Instability of foreign exchange rate (value of foreign money in terms of home money) disturbs international trade and makes the settlement of international obligations difficult.

There has been considerable controversy as to which of the two objects, viz., internal price stability or exchange stability, should the central bank pursue, when both cannot be attained at the same time. Other things being equal, a country with greater interest in foreign trade (e.g., England) would pay more attention to stability of exchange and a country with relatively small foreign trade (e.g., India) would concentrate more on internal stability.

**Economic Stability.** A more recent view rejects the aims both of exchange stability and of internal price stability. It is held that the central bank should aim at smoothening out the business cycle, which may not result merely from price movements. The aim should be to maintain a normal steady growth of business activity and prevent booms and slumps.

Regarding the adequacy of the banking policy in this regard, Crowther remarks, "Banking policy will never be sufficient by itself to bring economic utopia into being. Its first task should be to prevent the natural instability of a complex credit system from increasing the amplitude of economic fluctuations. Its second task should be to attempt deliberately to offset some of the causes of disturbance that are beyond its control. But for those causes themselves we must look outside the realm of money."<sup>5</sup> (For detailed discussion see Chapter 58 on Foreign Exchanges).

### Difficulties of Credit Control

There are several difficulties in the way of the central bank being able to control credit:

First, bank credit is not the only form of credit. There is commercial credit like book credit, bills of exchange and promissory notes (not discounted by banks). Over these, the central bank has little control. They are as much purchasing power as any other form of credit.

Secondly, even as regards bank credit, all banks of the country do not have direct relations with the central bank. In the U.S.A. for instance, one-half of the commercial banks with one-fifth of resources are outside the Federal Reserve System. In India, the indigenous bankers, accounting for nearly 90 per cent of the banking business in the country, are still beyond the influence of the Reserve Bank.

Thirdly, even if all banks were member-banks, commercial banks may not always co-operate with the central banks and may not follow its lead. Such

5. Crowther—*Op. cit.*, p. 201.



co-operation, as we shall see, is indispensable for a successful control of credit.

Fourthly, there are non-banking elements in the financial structure of a country. Among these are the various circumstances that affect the temper of the business community. These are beyond the scope of central banking action.

Finally, the central bank cannot control the ultimate use to which credit may be put. Strictly commercial loans, for instance, may be used for speculative purposes.

**Conclusion.** This, however, does not mean that any attempt to control credit on the part of the central bank is bound to fail. These are the limitations to which the action of the central bank is subject.

### METHODS OF CREDIT CONTROL OR INSTRUMENTS OF MONETARY MANAGEMENT

Now we proceed to discuss the methods of credit control, also called the central banking techniques.

There are, broadly speaking, two types of controls used by the central banks in modern times for regulating bank advances: (a) Quantitative or General Credit Controls and (b) Qualitative Controls or the Selective Credit Controls. The aim of the quantitative controls is to regulate the amount of bank advances, *i.e.*, to make the banks lend more or lend less. The object of the selective credit controls is to divert bank advances into certain channels or to discourage them from lending for certain purposes. These selective controls have of late assumed great importance.

The following are the principal methods of credit control used by the central banks in modern times:—

#### Quantitative or General Controls

- (i) Manipulation of the Bank Rate;
- (ii) Open market operations;
- (iii) Varying reserve requirements;
- (iv) Credit rationing;

#### Qualitative or Selective Controls

(v) Regulation of consumer credit or regulating volume of instalment credit buying (a) by regulating the minimum down payments for specified goods, (b) by fixing the coverage of selective consumers' durable goods, (c) by regulating the maximum maturities (payment period) on all instalment credit, and (d) by fixing the maximum exemption costs of instalment purchases of specified goods;

(vi) Varying margin requirements for certain bank advances; and

(vii) Issuing directives to restrict certain bank advances.

Let us take these in turn.

#### General Credit Controls: Manipulation of Bank Rate

The **bank rate** is the rate at which the central bank of a country is willing to discount first class bills. It is thus the rate of discount of the central banks, while the market rate is the rate of discount prevailing in the money market among the other lending institutions. Since the central bank is only the lender of the last resort, the bank rate is normally higher than the market rate. The term '**rate of interest**' is the rate which the commercial banks pay to those who keep deposits with them. The banks' **call rate** is the rate at which money is advanced by banks for very short periods to bill brokers, *etc.*

In a perfectly developed money market, all these rates bear a more or less constant relationship with each other. Before World War I, for instance, in England the banks usually fixed their deposit rate.  $1\frac{1}{2}$  per cent below the bank rate. The call rate was fixed usually  $\frac{1}{2}$  per cent above the deposit rate to enable the banks to have a margin of profit between what they charged and what they paid. The banks charged about 1 per cent above the bank rate on advances to their customers, subject to a minimum of 5 per cent. The relationship between the bank rate and the market rate of discount was determined by the conditions of the money market.

Under such conditions, therefore, if the bank rate was changed all the other rates normally moved in the same direction, though this did not always happen as we shall see.

In countries, where the money market is not so well organised, the relationship between the bank rate and the other rates is not so close. To that extent, therefore, the central bank is unable to influence these other rates by changing its own rate of discount.

**Theory of Bank Rate Policy.** According to the theory, changes in the bank rate of the central bank are followed by corresponding changes in all the local money rates. If the bank rate is raised, the market rates and other lending rates of the money market also go up. Conversely, the market rate of discount and the other rates go down when the central bank lowers its bank rate. These changes affect the supply and demand for money. Borrowing is discouraged when the rates go up and encouraged when they go down. In the former case a contraction of credit and in the latter its expansion, is the result.

The flow of foreign short-term capital is also affected. There is an inflow of foreign funds when the rates are raised and an outflow when they are lowered.

Internal price-level tends to fall with the contraction of credit and it tends to rise with its expansion.



Business activity, both commercial and industrial, is stimulated when the rates of interest are low, and discouraged when they are high. An adverse balance of international trade can be corrected through lowering of domestic costs and prices by contraction of credit, since this stimulates exports and discourages import.

**Bank Rate Policy under Gold Standard.** The theory of this policy is specially adapted to gold standard. It operated most successfully, therefore, in Great Britain before 1914. Under gold standard, an adverse balance of trade is indicated by movement of the exchange rate to the gold export point and outflow of gold. This may be due to excessive export of capital or excessive import of merchandise. Conversely, when the balance of payments<sup>6</sup> is favourable, there is an inflow of gold.

Under such conditions, raising of the bank rate led to contraction of credit. This was followed by greater sale of commodities and securities since their holding became more costly due to higher rates of interest, fall in domestic demand due to fall in the incomes of various groups, decline in new investment and speculation and fall in prices and wages.

The ultimate result was encouragement of exports, inflow of foreign capital, discouragement in the withdrawal of foreign capital, etc. In due course, equilibrium was restored and the outflow of gold stopped. If the policy was continued long enough, there would be inflow of gold, thus relieving credit stringency, lowering money rates and reviving business activity.

Thus, the raising of the bank rate has two effects: (i) **immediate**, and (ii) **ultimate**. **Immediately**, borrowing is discouraged as the discounting of bills becomes a costly affair. Money, therefore, does not leave the banks. Instead, funds flow in even from abroad as the raising of the bank rate is followed by the raising of the bankers' deposit rate. **Ultimately**, prices fall through contraction of credit and currency. Exports are stimulated and imports are checked. The objective of raising the bank rate is thus achieved, viz., drain of gold out of the country is checked and, instead, gold comes in.

Conversely, if there was a continued inflow of gold, the central bank would lower the bank rate. This would cheapen money and encourage expansion of credit, trade, production, investment and speculation. It would raise domestic prices and costs, encourage imports and discourage exports. Investment in foreign countries would be encouraged. If the policy is continued long enough, an adverse balance of payment would arise and gold inflow would be changed into outflow.

**Limiting Conditions of Bank Rate Policy.** For a successful working of such a policy, a little reflection

will show that a number of conditions have to be satisfied:

(i) All the other rates should follow the bank rate in its movement so that credit should expand and contract as the case may be.

(ii) The economic structure of the country should be elastic so that changes in credit conditions should lead to corresponding changes in wages, rents, production, trade, etc.

In a well-organised money market like that of Great Britain, the first condition is satisfied. In Great Britain, as we have seen, all the other rates have a more or less constant relationship with the bank rate as a matter of convention.

As regards the second condition, again, conditions in Great Britain were most favourable, especially before 1924. The economic structure was fairly elastic. Wages, rents and production responded within limits to changes in money rates and credit conditions. In subsequent years the British economic structure considerably lost its old elasticity. This was due to various reasons among which were the breakdown of the gold standard and coming in of the managed currency and regulation of wages and prices.

As regards other countries, the bank rate policy was always much less successful due to the absence of the above two conditions. The decline in its relative importance is due to changes in money market conditions and the greater rigidity of the economic system as already noted.

Several recent developments in the money markets have made the bank rate policy less efficacious. For instance, domestic trade is financed now more through bank overdrafts and less through bills of exchange which play an important part in discounting operations. Foreign bills have also lost a good deal of their importance due to the fact that London no longer enjoys the same financial status as it used to before the war of 1914-18. Moreover, short-term Treasury Bills have taken the place of bills of exchange for short-term investments. This has increased the influence of the Treasury over the money market.

Moreover, the old sensitivity of business with regard to changes in the rate of interest has been greatly reduced by increased resort to self-financing of business investment out of undistributed profits. The businessmen do not depend on borrowed funds as much as they did before with the result that a change in the rate of interest, and interest is the price of borrowing, leaves them unmoved.

Further, with the quickening of the pace of technical progress, riskiness of business has increased so that even though the normal economic life of capital assets may extend over a long period, businessmen want to recover their capital costs in a short period of three to four years. In such a

6. For Balance of Payments, see Chapter 67



situation, the rate of interest does not exercise an important influence on investment decisions.

Another contributory factor has been the growth of progressive system of income and profit taxation. An increase in the rate of interest increases the cost of production and, given the sales receipts, reduces the pre-tax profit. But with the lowering of pre-tax profits, the tax rate also is reduced so that profits **post-tax** do not fall as much as profits pre-tax. From the businessmen's point of view, profits post-tax are more important than pre-tax profits and the progressive system of taxation neutralises somewhat the adverse effects of high interest rates on the profitability of investment.

**Keynes's View of the Bank Rate Policy.** According to the late Lord Keynes, the traditional theories of bank rate concentrated largely on the influence of bank rate as a means of regulating the quantity of bank money and of protecting a country's gold reserves. It had not taken account of the influence of bank rate on the rate of investment relatively to saving, and the influence of changes in the relation between investment and saving on prices, production, employment and wages.

Keynes criticised Hawtrey who had emphasized investment but only one particular kind of investment, namely, "investment by dealers and middlemen in liquid goods, to which," said Keynes, "a degree of sensitiveness to changes in bank rate is attributed which certainly does not exist in fact."

According to Keynes, economic situation is affected not through the changes in short-term rate of interest and in the stocks of working capital goods, but through the long-term rates of interest and the volume of fixed capital goods. Changes in the bank rate lead to changes not only in short-term rates of interest, but also in long-term rates, since the last two are inter-connected.

In his 'General Theory, etc.,' Keynes emphasised the importance of equilibrium between saving and investment for general economic stability. He was, however, of the view that apart from regulation of quantity of money through open market operations (to be studied presently) such equilibrium should be attained, not by the bank rate policy but by the State directly organizing investment and starting public works in periods of depressions. Keynes regarded bank rate policy as an out-of-date method of controlling credit.

**Conclusion.** The bank rate policy, however, has not yet gone completely out of use, though its relative importance has been much reduced. It is still used as an instrument for correcting wrong trends and restoring equilibrium through its influence on the supply of, and demand for, money. Whether it acts through affecting short-term interest rate and investment in liquid goods, as Hawtrey

holds, or through long-term interest rates affecting investment in capital goods as contended by Keynes, is a matter which is difficult of verification. Interest, moreover, is only one of the elements of cost, whether the investment is in liquid goods or in capital goods. The state of trade and prices is affected by several other factors. It should also be remembered that the explanations of the process given by Hawtrey and Keynes are not mutually exclusive. A change in bank rate may lead to changes in holding of stocks as well as investments in fixed capital goods. The difference is only of emphasis.

### Open Market Operations

**The Theory.** The term '**Open Market Operations**' in the wider sense means purchase or sale by a central bank of any kind of paper in which it deals, like government securities or any other public securities or trade bills, etc. In practice, however, the term is applied to purchase or sale of government securities, short-term as well as long-term, at the initiative of the central bank, as a deliberate credit policy. This method of credit control has attained great importance during the last two or three decades.

The theory of open market operations is like this: The sale of securities by the central bank leads to contraction of credit and the purchase thereof to credit expansion. When the central bank sells securities in the open market, it receives payment in the form of a cheque on one of the commercial banks. If the purchaser is a bank, the cheque is drawn against the purchasing bank. In both cases the result is the same. The cash balance of the bank in question, which it keeps with the central bank, is to that extent reduced. With the reduction of its cash, the commercial bank has to reduce its lending. Thus, credit contracts. When the central bank purchases securities, it pays through cheques drawn on itself. This increases the cash balance of the commercial banks and enables them to expand credit. "**Take care of the legal tender money and credit will take care of itself**" is the maxim.

This method is sometimes adopted to make the bank rate policy effective. If the member-banks do not raise their rates following the rise in the bank rate, due to surplus funds available with them, the central bank can withdraw such surplus funds by the sale of securities and thus compel the member-banks to raise their rates. Scarcity of funds in the market compels the banks directly or indirectly to borrow from the central bank through rediscounting bills. If the bank rate is high, the market rate cannot remain low.

**Limitations of the Theory.** It is obvious that the above will be valid only if certain conditions are satisfied. The limitations are discussed below:



(i) The theory is that when the central bank purchases securities, the cash reserves of the member-banks will be increased and conversely, the cash reserves will be decreased when the central bank sells securities. This, however, may not happen. The sale of securities may be offset by inflow of gold into the bank or by return of notes from circulation and hoards. The purchase of securities, on the other hand, may be accompanied by an outflow of gold or withdrawal of notes for increased currency requirements or for hoarding. In both the cases, therefore, the cash reserves of the member-banks may remain unaffected.

(ii) But even if the cash reserves of the member-banks are increased or decreased, the banks may not expand or contract credit accordingly. The percentage of cash to credit is not rigidly fixed and can vary within quite wide limits. The banks will expand and contract credit according to the prevailing economic and political circumstances and not merely with reference to their cash resources.

(iii) The third condition is that when the commercial bank's cash resources increase the demand for loans and advances should increase too, and vice versa. This may not happen. Owing to economic or political uncertainty, even cheap money rates may not attract borrowers. Conversely, when trade is good and prospects of profits bright, entrepreneurs would borrow even at high rates of interest.

(iv) Finally, the circulation of bank credit should have a constant velocity. But the velocity of bank deposits is rarely constant. It increases in periods of rising business activity and decreases in periods of depression. Thus, a policy of contracting credit may be neutralised by increased velocity of circulation, and vice versa.

**Conclusion.** In spite of these limitations, however, there is a fairly close relationship between the sale and purchase of securities by the central bank and contraction and expansion, respectively, of bank credit.

Since for the success of market operations it is necessary that there should be broad and active market in short and long-term government securities, and such markets exist only in the U.S.A. and Great Britain, this method of credit control has been most effectively used in these two countries.

In Great Britain especially, this method has been widely used with the objects of making bank rate effective, or counteracting the effect of seasonal movements of funds, or offsetting the inflow and outflow of gold and for creating and maintaining conditions of cheap money in the interest of business.

### Credit Rationing

Credit rationing means restrictions placed by the central bank on demands for accommodation made upon it during times of monetary stringency and

declining gold reserves. The credit is rationed by limiting the amount available to each applicant. Further, the central bank restricts its discounts to bills maturing after short periods. This method was used by the Bank of England till the end of the 18th century when the usury laws prohibited the raising of discount rate beyond 5 per cent. After the critical period following World War I, credit rationing has been adopted as a policy by a number of countries like Russia and Germany.

This method of controlling credit can be justified only as a measure to meet exceptional emergencies because it is open to serious abuse.

**Direct Action and Moral Suasion:** The other methods of credit control may be noted only briefly. There is what is called 'direct action.' This implies coercive measures like refusal on the part of the central bank to rediscount for banks whose credit policy is not in accordance with the wishes of the central bank or whose borrowings from the central bank are excessive in relation to their capital and reserve. The central bank may, on the other hand, request and persuade member-banks to refrain from increasing their loans for speculation or non-essential activity. The method of publicity is also used. This means issuing of weekly statistics, periodical review of the money market conditions, public finances, trade and industry, the issue of weekly statement of assets and liabilities in the form of balance sheets, etc.

### Varying Reserve Requirements

When it is sought to restrict credit, the central bank may raise the reserve ratio. In 1960, for instance, the Reserve Bank of India required the scheduled banks to maintain with it additional reserve equivalent to 25 per cent of the increase in their bank deposits (later raised to 50 per cent). The Reserve Bank Act was amended in 1962 which requires all banks to maintain at the close of business on any day a minimum amount of liquid assets equal to not less than 25 per cent of their total demand and time liabilities exclusive of the balances already maintained with the Reserve Bank. Also, the Reserve Bank was empowered to vary the cash ratio from the minimum requirement of 3 per cent to 15 per cent of the aggregate liabilities.

Variations of reserve requirements affect the liquidity position of the banks and hence their ability to lend. The raising of reserve requirements is an anti-inflationary measure inasmuch as it reduces the excess reserves of member-banks for potential credit expansion. The lowering of the reserve ratios has the opposite effect.

**Limitations.** There are, however, limitations to the success of this weapon of credit control: (a) The banks may have very large excess reserves and it may not be easy to alter legal reserve requirements; (b) the banks have ready access to reserve funds



which may nullify the rise in reserve requirements; (c) a large net inflow of gold in payment of persistent export surplus may increase the banks' power to lend; and (d) the government policy of keeping interest rates low and stable would keep large reserves in the banks and may discourage too drastic increases in reserve requirements.

#### **Selective Credit Controls: Varying Margin Requirements**

Another weapon in the hands of the central bank for controlling credit is to vary the margin requirements. While lending money against securities, the banks keep a certain margin. They do not advance money to the full value of the security pledged for the loan. In case it is desired to curtail bank advances, the central bank may issue directives that higher margin be kept. In 1960, for instance, the Reserve Bank of India raised to 50 per cent the minimum margin requirement for bank advances against equity shares. The raising of margin requirements is designed to check speculation in the stock markets and to prevent the typical 'boom-bust' pattern in the stock markets. In this way, the demand for speculative credit is controlled. The higher the margin required, the less credit one would obtain for the purchase of stocks.

Some of the beneficial effects of raising margin requirements are:

(a) High margin requirements divert investible funds from speculative to productive channels.

(b) They also check undue monetary expansion because the commercial banks are to this extent prevented from manufacturing speculative 'bank money' and thus increasing the total money supply.

(c) High margin requirements reduce the inflationary effect of speculative profits upon the income-expenditure structure of the company, and thus contribute to the prevention of a 'boom bust' development.

(d) Finally, the high margin requirements contribute to the stability in the economy by eliminating or curbing speculative activity in the country. It is useful in minimising cyclical disturbances. The margin requirements can also be lowered to foster 'bullish' sentiment in a period of low activity.

The Reserve Bank of India made use of selective credit controls for the first time in 1956. It issued directives to banks to refrain from excessive lending against foodgrains, sugar, groundnuts and shares. As

already mentioned, in 1960, margin requirements for advances against equity shares were raised to 50 per cent. The selective credit controls have been operated by the Reserve Bank with suitable modifications from time to time in the light of demand and supply position of the commodities. The credit restraint measures were intensified in May, 1960, but it later relaxed these measures with a view to easing pressure of seasonal stringency. Similarly, in 1962, the improvement in the supply and price situation led to the relaxation of some of the controls. In this way, the Reserve Bank of India has been adjusting the control machinery to changing situations.

**Limitations of Selective Credit Controls.** It is not to be supposed that selective controls can be freely operated so as to fully achieve their objectives. They are subject to some serious limitations:

(i) The selective credit controls are concerned with bank advances only. But there are other sources of finance which are beyond these controls, e.g., borrowing from non-banking institutions like insurance companies. Moreover, the companies have reserve funds and undistributed profits to fall back upon or they can issue capital or debentures.

(ii) It is also possible that the loans taken for other purposes may be diverted to the lines which are forbidden under the selective credit controls. It is not easy to keep track of the purposes for which the bank advances may be utilised.

(iii) Further, the banks themselves lend money under different labels on the understanding with their customers that they can invest them in forbidden uses. Such a collusion between the banks and their customers may reduce the selective credit controls to naught.

#### **Conclusion**

On the central bank's power to control credit, Crowther concludes thus: "There are thus limits on the central bank's ability to control the volume of money in existence in the country. But they are broad and elastic limits ... Over the quantitative aspects of money in a modern State the control of the central bank is very great. To the question: 'What determines the quantity of money in existence?' the answer is: 'The policy of the central bank, using its free discretion within limits that are normally very broad' ... In its own field the central bank is clearly a dictator."<sup>8</sup>

8. *An Outline of Money*, 1950, p. 58.



**Objectives**

The principal objectives of monetary policy are:

- (a) The safeguarding of the country's gold reserves,
- (b) Price stability,
- (c) Exchange stability,
- (d) Elimination of cyclical fluctuations
- (e) Achievement of full employment, and
- (f) In the case of under-developed economies, accelerating economic growth.

Which particular objective is to be pursued at any given time will depend on the economic situation to be tackled.

We may consider whether a country should follow a dear money policy or a cheap money policy or a neutral money policy. We shall also consider a suitable monetary policy for a developing economy. We have already discussed monetary policy for full employment.

**Dear Money vs. Cheap Money**

**Meaning.** In a discussion on money, we think it necessary to take notice of controversy centring round the policy to be pursued regarding money.

When the economy has been shattered by war or disrupted by depression, one controversy looms large on the economic horizon, viz., should the country follow a dear money policy or a cheap money policy?

But what do we mean by dear money or cheap money? Some students are prone to think that dear money means that its value in terms of commodities and services is high, i.e., prices are low, and that cheap money, on the other hand, implies that the value (or purchasing power) of money is low and prices have gone up. Now dear money may be associated with low prices, and cheap money, with high prices, but the terms 'dear money' and 'cheap

money' are not defined in this sense. The price of money, which the terms 'dear' or 'cheap' are supposed to indicate, is not in terms of its exchange value or purchasing power.

The 'price' of money more appropriately refers to the rate at which money can be had or borrowed. Thus, '**dear money**' means that the borrowing rates, or interest rates are high and '**cheap money**' means that interest rates are low. The price of money, in short, is the rate of interest.

Which is Better? Some economists advocate dear money policy, while others are in favour of cheap money policy. Which is better? It all depends on the economic situation with which we are faced. The rate of interest has been recognised to be an important tool for the execution of an economic policy. There are times when the appropriate economic policy demands that the rate of interest in the money market should be kept low, and there are times when interest rates have to be kept high in view of the economic objective before the community.

**When Dear Money?** When there is a state of galloping or hyper-inflation, when there is hectic speculative activity, when there is reckless investment by industrialists, when credit creation by the banks has crossed all prudent bounds, when balance of payments is heavily against the country or threatens to continue unfavourable, a dear money policy is indicated. It is a deflationary move. It will apply a brake on senseless capital investment; it will check reckless credit creation by the banks; it will stem the rising tide of prices; it will muzzle the mad career of the speculator; and it will ultimately put the balance of payments position of the country on a stable footing.

**When Cheap Money?** Cheap money policy, on the other hand, is indicated in the opposite set of circumstances. For instance, when the business enterprise is groaning under the benumbing and



baneful effects of depression, when the banks are shy of lending, when the low price-level is killing economic incentive, when there is widespread unemployment, and when a comprehensive building programme has to be put through, and so on, a cheap money policy, or a policy of low interest rates is the best. It will stimulate investment, create employment or reduce the incidence of unemployment; it will oil the wheels of the industrial machine; it will, in short, tend to lift the blanket of depression and remove its deadening influences.

Thus, Cheap money policy (*i.e.*, cheapening of credit services) is a tool for (a) combating slump, (b) fighting unemployment, and (c) financing development programmes. When a cheap money policy is adopted, the government has to borrow in the open market. In case there is dearth of credit, the prices of securities will rise and the demand for them will fall. The government will have to rely on institutional investors. Cheap money policy means the monetisation of public debt, *i.e.*, the public debt is turned into liquid cash. If a stage of full employment has already been reached, it will mean an inflationary finance.

**How Far Feasible?** Now the question arises: Is it in the power of the State through the central bank or otherwise to fix and control interest rates to keep the money cheap or dear? Is not the rate of interest determined by the operation of natural forces relating to demand and supply of loanable funds? As has already been explained, the theory that the rate of interest brings about an equilibrium between demand for saving and supply thereof has now been exploded. As Sir William Beveridge points out, "The rate of interest cannot fulfil the function (of equilibrating demand and supply), because capital expenditure brings into existence the very savings necessary to finance it. There is no question of 'equilibrating' the one to the other because they are kept in equality by changes in the level of income."<sup>1</sup> If there is a low rate of interest, investment is encouraged. Any expenditure incurred by the community out of loans and reserves will bring additional income and create new sources of saving. Thus, low rate of interest does not discourage saving, but it encourages expenditure and investment and makes more savings possible.

It is now accepted by modern economists that it is in the power of the State to fix and maintain low rates of interest, and the rate is not determined by any natural factors. This is shown by the fact that the ever-mounting demands for loans during war and post-war years have been satisfied at low rates of interest. This clearly indicates the possibility of controlling interest rates.

Let us see how it is done. The interest rate can be controlled through a control over savings. For this, it

is essential to know the different forms that savings take. There are four ways in which people hold their savings, *viz.*, cash balances, bank deposits, bills (*i.e.*, short-term investments) and bonds (*i.e.*, long-term investments). The government may decide to fix a particular rate of interest considering the overall economic picture of the country and then leave the saving public to adjust their savings and the forms in which they would wish to hold their savings at that rate. As Beveridge puts it, "That is to say, that government must offer long-term bonds and short-term paper 'on tap' so that savings can flow into them according to the wishes of the savers."

In case, however, it is found that the government is unable to raise the desired amounts at the rates announced and the public subscription to long-term or short-term issues falls short, the government can obtain the balance from the central bank through "Ways and Means" advances. As the government expenditure proceeds, new savings will be created and the cash balances of the banks will go up. The savings that the public can hold in cash and bank deposits are governed by the business turnover; they will also invest their surplus savings in short or long-term paper.

The feasibility of fixing stable rate of interest is thus beyond question. The government has simply to decide the rate and then offer to the public what they would wish to hold given this rate. The only safeguard is that the change in the rate must be gradual. There should be no sudden break. That is why it will not be feasible to fix a zero rate and then try to maintain it as described above. In case of sudden reduction of the rate, there will be a sudden appreciation of capital assets and long-term money claims; it will create a chaos and social tension. The stream of gilt-edged securities will dry up and the very foundation of activities of financial institutions like the banks and insurance companies will crumble.

### Neutral Money Policy

We have discussed above the pros and cons of dear money vs. cheap money. But there is the third course open, *viz.*, neutral money policy. This policy is based on the philosophy of *laissez-faire*. In practice, however, it is a departure from the *laissez-faire* doctrine, inasmuch as, to achieve the objectives of neutral money policy, the monetary authority will have to pursue an active policy. The neutral money theory is associated with the name of Prof. F.A. Hayek.<sup>2</sup> The Advocates of this theory believe that the most important causes of economic instability lie in the monetary changes. Eliminate them and you ensure a smooth and steady economy.

It is a policy which seeks to neutralise or eliminate

1. *Full Employment in a Free Society*, 1945, p. 307.

2. Hayek, F. A.—*Prices and Production—Monetary Theory, and Trade Cycles*.



the dislocating and disturbing influences caused by the creation or expansion of money on the one hand, and its destruction or contraction on the other. The creation or injection of new money is supposed to cause inflation whereas withdrawal or contraction of money produces a deflationary effect. Inflation is associated with cheap money and deflation with dear money. From the point of view of economic stability or stability of price, output and employment, both inflation and deflation are considered bad. We should have neither the one nor the other. Money should be neither dear nor cheap.

The neutral money policy is thus identified with zero-mark of inflation and deflation. It seeks to create a state of affairs as if money did not exist, lest it should be inflationary or deflationary; and, as if exchanges (trade) were all by barter. But since money does not disappear altogether, inconveniences of barter do not exist. In the pursuit of the neutral money policy, the monetary authority has to so regulate the supply of money that the production levels, price-levels and the volume of transactions are such as if the community did not use any money. It is supposed that if the distorting influence of circulating media were kept out, the economy of such an imaginary non-monetary community would be kept stable through the operation of neutral forces of competition.

**How to achieve the aim of neutral money policy?** We have seen what the neutral money policy aims at. The question is, how is this aim to be realised? We should bear in mind that under this policy both inflationary and deflationary tendencies have to be curbed. Can we do it by keeping the supply of money constant? Not at all.

We know that price changes are not merely caused by changes in the supply of money but also by such factors as changes in output, in population, improvement in technique and transport, changes in velocity of circulation of money, etc. These changes must also be neutralised. If the supply of money were kept rigidly fixed, economic progress and improvement in productive efficiency would bring about a disastrous fall in prices in a generation, and this is precisely what a neutral money policy does not want. Thus, merely avoidance of money creation and money contraction will not achieve the objective of neutral money policy.

What then should the monetary authority do? If population increases, demand for money will increase and this demand must be satisfied, otherwise shortage of money will cause deflation and this is what the neutral money policy must avoid. If velocity of circulation of money increases, it will be inflationary, and to check that, the speed at which money is being created must be slowed down. If due to inventions and other technical improvements or improvements in the productive efficiency of the factors, the volume of production goes up, then the

quantity of money is not to be increased because in this case the fall in prices is not dangerous or disturbing. If due to improvement in transport, business turnover increases, more money must be created to cope with the increased traffic. If the movement towards vertical integration of business becomes strong, demand for money will be correspondingly reduced. The monetary authority should take this factor, too, into consideration and adopt compensatory measures. It must also keep a close watch on the policies of the monopolists to keep their prices at reasonable levels.

In short, it has to keep its eye on the price-level rather than keep the supply of money constant so that dangerous turns in prices are avoided.

**How far could this policy be efficacious?** On paper, the theory looks simple and the neutral money policy seems straight. Actually, there are so many complications. The theory wrongly assumes that the sole or the important determinants of business cycles are the monetary changes. So diverse are the factors affecting price-levels, volume of output and employment that no amount of monetary regulation can ensure stability. The modern economists are not prepared to subscribe to the view that the business cycle is a purely monetary phenomenon. The neutral money policy thus suffers from serious limitations.

**How does neutral money policy differ from the policy of price stabilisation?** In order to distinguish between the neutral money policy and the policy of price stabilisation as such, we should bear in mind that there are two types of price-levels; one is the general price-level, a sort of average of all price-levels; and the other is the relative price-level. In one sense, the aim of both these policies is the same. Both seek to neutralise money and to make it play a passive role so that if there are any economic fluctuations, money should not be held to blame. The aim of both is to remove a major cause of economic fluctuations.

But there is this difference between the two: the aim of the policy of price stabilisation is to prevent changes in the general price-level so that money as a unit of account remains neutral or behaves in a stable manner. The aim of the neutral money policy is to keep the structure of relative prices stable. For this purpose, it seeks to regulate the total effective quantity of money so that money as a medium of exchange is not allowed to cause any disturbance in the economy.

#### MONETARY POLICY FOR A DEVELOPING ECONOMY

In a developing economy, monetary policy has a special role to play. A developing economy has to make a very large-scale mobilisation of productive resources of all types and has to organise their most



efficient allocation. The task of implementing the development plans of sizable dimensions is a big task and an all-out effort is required on the part of all authorities to ensure their successful implementation. The monetary authorities have to play their full part.

One important requirement for steady economic growth is the environment or atmosphere of comparative price stability and absence of inflation. For a steady and sound economic advance and for efficient utilisation of resources, for avoidance of distortion and dislocation of investment programmes and for the promotion of the objective of greater economic equalities or of lessening inequalities of income and wealth, it is essential that there should prevail in the economy an atmosphere of general financial stability including price and exchange stability. "A non-inflationary environment is conducive to sustained, continuous and efficient development rather than fitful, uneven and unstable growth."

Now let us see what weapons can be used to ensure financial and price stability. There are the physical or direct controls like price control and rationing of essential commodities in short supply. But owing to vast numbers of producers and consumers, physical controls are difficult to administer. In an under-developed economy, the administrative organisation cannot successfully cope with the complicated and difficult task of operating physical controls. Beyond a point, these controls become too vexatious and hamper initiative and enterprise. On the other hand, monetary controls are more efficacious and less vexatious and do not raise many administrative problems.

Then, there is the fiscal instrument or budgetary action on the part of the government involving income and commodity taxes. Fiscal policy involves a direct draft on the financial resources and purchasing power in the hands of the public and with the particular classes of producers and consumers. Taxes can also differentiate between various classes of consumers and producers through reliefs and rebates and are, therefore, more fair.

But, in under-developed countries, fiscal policy has serious limitations inasmuch as the proportion of taxation to national income is very low: 9 per cent in case of India as against 28 per cent in the U.K., 33 per cent in the U.S.A., 27 per cent in Germany, 25 per cent in France, 22 per cent in Italy and 21 per cent in Japan. Hence, monetary action is also called for.

The fact is that all types of weapons—physical, fiscal and monetary—have to be used in combination with one another to ensure the requisite atmosphere for the successful implementation of the development plans and to promote steady and healthy growth of the economy. We are here concerned with the monetary policy.

### Role of Central Bank in Economic Development

In a developing economy, the central bank has not to be content with merely playing a **regulatory role**. Its role must be promotional and developmental. It must not only mobilise the financial resources of the country by means of expansion of sound banking facilities, it must also make these funds available to finance the development programmes in respect of agriculture, trade, transport and industry and create specialized financial institutions for the purpose.

In the words of Indian Planning Commission, "Central Banking in a planned economy can hardly be confined to the regulation of the overall supply of credit or to a somewhat negative regulation of the flow of bank credit. It would have to take a direct and active role, **first**, in creating or helping to create the machinery needed for financing development activities all over the country, and **secondly**, in ensuring that the finance available flows in the directions intended."<sup>3</sup>

The central bank can promote economic development in a number of ways. In particular, it can make a satisfactory provision for the following:—

(i) **Sound Currency System.** Economic development leads to the expansion of markets and increasing specialisation. To cope with this growth it is essential that the soundness and efficiency of the payment mechanism or the currency system must be maintained. It is obvious that if the currency loses value as in hyper-inflation, economic activity may be seriously hampered.

(ii) **Regulated and Adequate Money Supply.** Not only should the money supply be adequate for the expanded economic activity, but it should be properly regulated so that too much of it may not create an inflationary situation and too little result in recession or depression. By means of controlled expansion of credit, the monetary authority ensures growth with stability.

(iii) **Creation of New Financial Institutions.** The central bank creates special financial institutions for promoting economic development in different sectors such as Agricultural Finance Corporation, Industrial Finance Corporation, Export Finance Corporation, Small Industries Development Corporation, etc. These institutions provide much needed finance to accelerate development in their respective spheres.

(iv) **Tackling Balance of Payments Problem.** In a developing economy, owing to mounting imports of foodgrains, machinery and capital equipment, essential raw materials and technical know-how, the balance of payments turns adverse. The monetary authority tackles this problem by export promotion, import substitution, raising foreign loans so that economic development proceeds on an even keel.

3. *First Five Year Plan*, p. 38.



(v) **Restraining Inflationary Pressures.** In a developing economy, the Government budgetary operations owing to increasing size of Government expenditure, generate strong inflationary pressures. It is the responsibility of the monetary authority to restrain these pressures by freezing part of the liquidity thus generated. This the monetary authority is able to do through its pivotal tool—the rate of interest. The prevailing rate of interest enters into assessment of profitability or remunerative character of projects. The productive enterprises even in the public sector cannot be immune from the pervasive influence of the rate of interest. The targets cannot be fixed only by administrative decisions independently of consideration of the rate of interest. The interest rates are governed by monetary policy. Hence, its vital role in a developing economy.

For the implementation of development programmes borrowing from banks is essential. The money is borrowed for investment for expanding the capacity of the existing plant or build a new plant or for holding additional stocks or for consumption. Naturally, there is expansion of bank credit. The fresh money supplies generated by the bank credit add to the active demand for goods and services. This tends to start the inflationary spiral. Then it becomes necessary for the monetary authority to step in and restrain the extension of bank credit, for increase in the bank credit has price raising effects. Even though restraints on bank credit may adversely affect productive enterprises, they are essential all the same in the interest of sound and steady economic growth in the country.

Thus, the monetary policy consists in central bank's action in the sphere of bank credit. The central bank seeks to regulate bank advances leaving the operation of the price mechanism intact and leaving productive enterprises freedom of initiative and autonomous functioning.

#### Limitations of Monetary Policy

The monetary policy has to face several difficulties in under-developed countries: the existence of a large non-monetised sector, perhaps one-third of the economy, in under-developed countries seriously limits the scope of the use of the monetary weapons. However, two-thirds of the economy offer large enough scope for monetary action.

Another limiting factor is the existence of a large non-organised money market, e.g., indigenous banking in India (it was 90 per cent in 1930 and is roughly 50 per cent now).

Moreover, in under-developed countries like India currency occupies a relatively more important position than bank deposits. In recent years, however, there has been a phenomenal growth of bank deposits. The bank deposits in India grew from Rs. 881 crores in 1950-51 to Rs. 14,155 crores at the end of 1975-76 and reached the level of Rs. 50,671

crores at the end of December 1982. The total bank deposits have out-stripped the currency money. This has increased the significance of Central Bank policies in the developing economies.

Also, in India, high expansion of banking credit during the busy season takes place through borrowing from the Reserve Bank. Co-operative finance completely relies on the Reserve Bank. Thus, the Central Bank has an increasing role to play. This is specially so because, in under-developed countries like India, there is lack of other financial institutions like building societies, finance houses, hire-purchase companies, etc.

The inadequate development of the capital market adds to the importance of commercial lending and correspondingly the importance of Central Bank policies. Greater dependence of commercial banks on central bank borrowing enhances the ability of the central bank to influence the credit policies of banks.

#### Role of Monetary Policy in Indian Economic Development

Let us briefly notice the role that the monetary policy has played in India in recent years. That would illustrate the role of monetary policy in a developing economy. During the last twenty five years of planning, the Reserve Bank of India has tried to regulate (a) the cost of credit, (b) the quantity of credit, and (c) the purpose or use of credit. For regulating the cost and the quantity of credit, the Reserve Bank has used the weapons of general or quantitative controls, e.g., regulating the bank rate and the open market operations and for regulating the purpose or the use of bank credit, the Reserve Bank has had resort to what are called the 'selective credit controls.'

The selective credit controls have been used primarily for regulating bank advances against foodgrains and other selected articles or raw materials like sugar or groundnut, temporarily cotton textiles and, recently raw jute and jute goods. These measures have been useful in restraining excessive speculative stockpiling of the commodities concerned, though their success is largely due to the fact of their being used in conjunction with measures of general credit control.

The efficacy of the selective controls is limited by the fact that they cannot be adopted in advance of future pattern of production; they are adopted when excessive bank lending has already taken place. All the same, it is necessary to maintain a framework of selective credit controls because unregulated bank credit for building of stocks is likely to accentuate price fluctuations.

As for instruments of general credit control, viz., the bank rate and the open market operations, the latter is more continuous and informal. But open



market operations have tended to become increasingly one-way traffic, *i.e.*, there has been more and more selling of the Government securities to reduce the gap in the budgetary operations. The scope of the open market operations is also limited by the capacity of the market to absorb the stream of Government securities flowing from the Reserve Bank pool. In effect, the open market operations have become more and more ancillary to Government debt management.

In India, the use of the Bank rate, which is the prime instrument of monetary policy, had neither been frequent nor considerable. The bank rate remained constant since the inception of the Reserve Bank in 1935 to 1951 when it was raised from 3 per cent to  $3\frac{1}{2}$  per cent and to 4 per cent in 1957. But in recent years, the weapon of the bank rate was used quite frequently. The bank rate was raised to  $4\frac{1}{2}$  per cent in 1963 to 5 per cent in 1964 and further to 6 per cent in 1965. In 1968, however, there was a reversal of dear money policy when in March, 1968, the bank rate was cut by 1 per cent to 5 per cent. Considering again that bank credit was showing a tendency of expanding too much, the bank rate was raised to 6 per cent in January, 1971 and further to 7 per cent on May 30, 1973. In July 1974, the bank rate was raised to 9 per cent and the minimum lending rate to be charged by commercial banks was stepped up from 11 per cent to 12.5 per cent. Simultaneously, interest rates on various categories of commercial bank deposits were enhanced. All these measures had the effect of restraining the growth in money expenditures.

In 1960, the Reserve Bank introduced a system of graded lending rates with the bank rate remaining unaltered. Under this system, borrowing quotas for scheduled banks were fixed at 50 per cent of their statutory deposits with the Reserve Bank and 1 per cent above the bank rate was charged for any borrowing in excess of the quota up to an amount equal to the basic quota and for further borrowing, above this additional quota, 2 per cent above the bank rate was charged.

Complementary to these measures, the Reserve Bank issued in September 1960 a directive raising the lending rates of the Scheduled banks by minimum of  $\frac{1}{2}$  per cent. It was followed by a move on the part of the banks directed to an upward shift in the pattern of deposit rates on savings and fixed deposit.

Thus, the rate of interest continues to be the core of monetary policy. A rise in interest rates has important effects, both direct and indirect, upon those who borrow and those who lend and also on the movement of the funds to and from the country. For some enterprises interest costs are a crucial part of the total outlay. A sharp rise in the interest rate is also expected to increase the more desirable kinds of savings.

There is another instrument which the Reserve

Bank has used to restrain expansion of bank credit, *viz.*, varying reserve requirements. This instrument is particularly effective in freezing additional liquidity when the banks are acquiring large new resources, correspondingly adding to their lending capacity. Twenty-five per cent (later 50 per cent) of the increase in deposits was frozen in 1960. This method is more appropriate as a temporary expedient to meet exceptional liquidity situations, while changes in general interest rates are more appropriate for a long-term structural adjustment to a situation of steadily improving liquidity.

The Reserve Bank of India was called upon to use the above weapons of credit control, for a serious inflationary situation had developed in the country during the last few years. There has been great increase in money supply and liquidity has outrun the pace of growth of real national income. Consequently, prices and cost of living have been rising.

A 20 per cent rise in prices from Feb.-end 1979 to Sept.-end 1979 *i.e.* since the presentation of the 1979-80 budget made the situation alarming. Among the factors responsible were a big increase in money supply of Rs. 1,182 crores during end-April to end-Aug. 1979 as against that of only Rs. 158 crores during the corresponding period of 1978. In order to curb the runaway expansion in bank credit and money supply, the RBI in August-Sept. 1979 reduced banks' resources under participation certificates, kept down cash credit and bill discounts, curtailed refinance, offered incentive to saving by raising rates of interest on fixed deposits, fixed ceiling rates on short-term advances, and so on. Such strong action on the monetary front was definitely called for to reduce the pressure of growing money supply and liquid funds generated by bank credit. It is good that the Reserve Bank adopted various credit-freeze measures.

It must be said to the credit of the Reserve Bank of India that it has fully risen to the occasion to meet the requirements of the developing economy. Besides, taking monetary measures mentioned above to maintain the general financial stability in the country and restraining inflationary pressures, it has helped in the creation of specialized institutions so that financial facilities are made available to agriculture and industry. Its developmental effort is indeed commendable.

We might enumerate a few things that the Reserve Bank of India has done in the field of developmental finance. It has made available short-term, medium-term, and long-term finance to agriculture through the hierarchical network of co-operative banks and societies. In this connection creation of two funds, *viz.*, the National Agricultural Credit (Long-term Operations) Fund and the National Agricultural Credit (Stabilisation) Fund deserves mention. It has also been instrumental in



setting up Agricultural Refinance and Development Corporation and lately NABARI. It has organised industrial finance so that industries, big and small, can secure all types of loans, short-term, medium-term and long-term. It has helped in the creation of Industrial Finance Corporation of India, State Financial Corporations, Refinance Corporation, National Small Industries Corporation, National Industrial Development Corporation, Industrial Credit and Investment Corporation and the Industrial Development Bank and the Unit Trust. It has introduced a scheme of guarantee of bank loans to small industry.

**Conclusion.** The Reserve Bank of India has thus helped to broaden and deepen the structure of institutional finance for accelerating economic development of the country with itself as the central arch of the banking and monetary framework of the country. It has sought to preserve a proper climate for economic development and has tendered to the Government and the planning authority its expert and invaluable advice. In short, it has acted as a guide, philosopher and friend to the Government in the sphere of finance.

### CONFLICTING OBJECTIVES OF MONETARY POLICY

Before we take up the conflict between the various objectives of monetary policy, we might enumerate once more the various objectives: (1) Price Stability (2) Exchange Stability. (3) Full Employment. (4) Economic Growth. (5) Balance of Payments Equilibrium.

**Other Objectives.** In addition to the above the other objectives are:

(i) Creation, working and expansion of different financial institutions. (ii) Provision of an efficient payment mechanism. (iii) Proper debt management. (iv) Evaluation of a rational interest rate structure. (v) Operation of credit control measures. (vi) Income Stabilisation by preventing or mitigating cyclical fluctuations. (vii) To ensure neutrality of money. (viii) To bring about monetary equilibrium in the economy by equalising savings and investment and demand for and supply of money.

**Compatibility of the Objectives.** Some of the objectives seem to be conflicting and mutually contradictory. For instance, take price stability and economic growth. In the period of growth, some price rise or inflation is inevitable. This is borne out by the economic history of various countries. Additional money has to be injected into circulation to finance development projects. This results in price rise. But inflation which is mild at first becomes hyper-inflation after some time and becomes an obstacle to economic growth. Thus price stability and economic growth are not compatible objectives.

Let us next consider price stability and full employment. The classical economists and Prof. Patinkin point out that full employment can only be achieved under conditions of price-wage stability. Phillips, Samuelson, and Solow also hold the same view. But various studies undertaken in this connection show that there is a positive correlation between price flexibility and full employment. Some trade-off between unemployment and inflation is to be found. Thus price stability and full employment are conflicting objectives.

Similarly, there is a conflict between full employment and balance of payments equilibrium. If monetary policy is designed to maximise domestic employment and economic growth, balance of payments deficit is bound to emerge. With the rise of domestic income, imports increase fast. Expansionary monetary policy will create inflation and exports will decrease. In this way balance of payments equilibrium will be disturbed.

The objectives of full employment and economic growth too will be found to be conflicting. Full employment is a static concept whereas economic growth is a dynamic concept. Full employment is concerned with raising output to the level of production possibility, whereas economic growth concerns itself with the raising of production possibility itself. If full employment increases income and imports and results in balance of payments dis-equilibrium, the measures adopted to correct it may militate against economic growth.

There is also some conflict between exchange stability, price stability and economic growth. In the initial stages of economic development, imports increase whereas exports are static. This results in exchange instability. Artificially raising the exchange rate will worsen the balance of payments position and slow down the rate of economic growth.

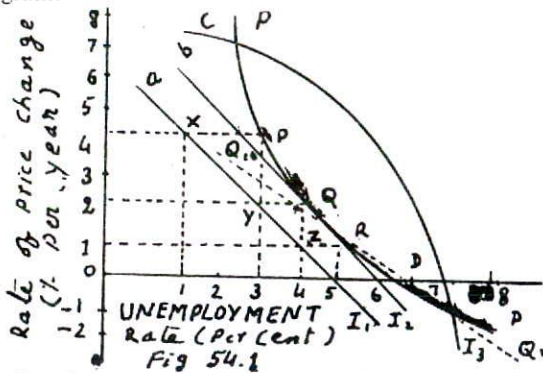
### COORDINATION OF OBJECTIVES

There is no doubt that some objectives of monetary policy are in conflict with others. But they can be also reconciled to some extent. There are two approaches to this reconciliation: (a) The optimising approach and (b) fixed targets approach. The authorities may lay down preference pattern regarding the objectives they would like to achieve. They may also select some rate of **trade off** or substitution between the conflicting objectives. In other words, it may be laid down to what extent one objective can be sacrificed for the achievement of another. It is thus possible to indicate the trade-off and lay down priorities among the objectives.

**Optimising Approach.** We can make use of Phillips curve (See P. 441) for illustrating the optimising

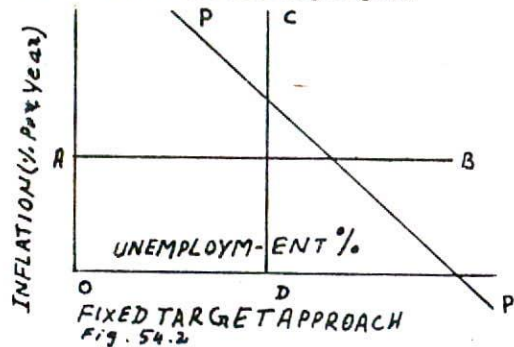


approach and the fixed-target approach. Phillips curve shows an inverse statistical relationship between the rate of change of money wage-rate (inflation) and unemployment. We can express the relationship between the rate of change of prices and the rate of unemployment. The trade-off between the rate of change of prices and unemployment rate can be illustrated by the following diagram.



In this figure (54.1), the rate of price change is represented on the vertical axis and unemployment percentage on the horizontal axis. PP is the Phillips curve. Point D shows a situation of price stability at an employment rate of 7 per cent (OD). 'a', 'b', 'c' are the indifference curves representing the policy preferences of the authorities regarding unemployment and inflation. Each of these curves shows equally acceptable combination of unemployment and inflation e.g. points x, y, z on the indifference curve 'a'. But the indifference curve nearer the origin (i.e. a) is preferred to those which are further off from the origin, because on this curve a certain level of unemployment is associated with smaller rate of inflation as compared with other curves. The authorities will choose a combination which will maximise social welfare. Obviously, they would like to choose point O where there is not only full employment but also price stability. But at this point there is a conflict between price stability and full employment. The authorities must therefore choose from the economically possible combinations which lie on the Phillips curve PP. The optimum combination will be where the indifference curve is a tangent to the Phillips curve. This is point Q where 2 per cent inflation and 4 per cent unemployment would maximise social welfare. In case the authorities prefer lower rate of inflation with higher rate of unemployment, they may choose 'R' which is a point of tangency between the Phillips curve and the indifference curve 'a'. This means that the authorities regard 5 per cent unemployment and 1 per cent inflation as maximising social welfare. Thus, the actual trade-off between unemployment and inflation will be determined by the preference pattern of the authorities.

**Fixed Target Approach.** In the fixed target approach, the authorities fix certain desirable targets (say 95 per cent employment and 5 per cent rate of inflation). The Phillips curve is adapted with the help of some policy instruments to achieve these targets. For instance, by the use of income policy, the objectives of price stability and full employment as determined by fixed targets can be achieved. This can be shown in the following diagram:



The Phillips curve PP will have to be lowered in order to enable the authorities to keep below the area of AB and to the left of CD.

#### Harmonious Adjustment and Judicious Mix.

Some conflicting objectives can be reconciled by making a harmonious adjustment and a judicious mix. For example, the conflict between the objectives of exchange stability and price stability can be resolved if the authorities adopt an action which while maintaining exchange rate coincides with the policy of price stabilisation.

In the case of conflicting objectives, the authorities should assign priorities, make a choice and try to have optimal combination depending upon the economic and social conditions of the country. For instance, an optional combination between some rate of wild inflation and economic growth may be found out.

The best way to coordinate the conflicting objectives is to give priority to the solution of short-term problems, but the short-term objectives must be subordinated to the long-term objectives.

### MONETARY POLICY VS FISCAL POLICY

Monetary policy affects income and expenditure through cost and availability of money, whereas fiscal policy affects income and spending through government revenues (i.e. taxes) and government expenditure. Monetarists assign more important role to monetary policy than to fiscal policy.



# BOOK FOUR : INTERNATIONAL ECONOMICS

## Part I International Trade Theory

55

THEORY OF INTERNATIONAL TRADE

### Inter-regional vs. International Trade

Inter-regional trade is trade between different regions within the same country, whereas international trade is between different countries. It should be noted that **the difference between inter-regional trade and international trade is only one of degree, not of kind.** The fundamental principles in both cases are the same. International trade, like inter-regional trade, is the result of division of labour. In internal or inter-regional trade, people specialise in producing goods in which they have a greater comparative advantage; the same thing happens in international trade.

### Why a Separate Theory of International Trade

**Differences between Internal Trade and Foreign Trade.** There are, however, several differences between domestic trade and foreign trade which necessitate the formulation of a separate theory of international trade:

**Mobility of Factors of Production.** Ricardo advocated a separate theory of international trade on the ground that within the same country, labour and capital are more mobile than they are between different countries. As regards labour, as Adam Smith puts it, "Of all sorts of luggage man is the most difficult to be transported." Several causes are responsible for this: differences of language, tradition, religion, customs, social and political life, etc., or mere inertia may keep labour at home. Capital is more mobile than labour. But even here people prefer to invest their savings in their own country for various reasons. An investor feels a greater sense of security if his capital is invested in his own country.

The result of this comparatively greater immobility of labour and capital between different countries is that competition fails to make costs of production of similar goods equal, as it does in the same country. This gives unequal advantages to different countries in the production of different commodities. The different countries thus constitute non-competing groups.

There is another consequence of comparative immobility of labour and capital as between one country and another: "Within a country, the price of a commodity, in the long run, tends to approximate to its cost of production. This is so because labour and capital can easily move into or move out of an industry, if the price is respectively more or less than the cost of production. This cannot happen in the case of international trade. Labour and capital being immobile, price and cost of production can seldom approximate.

Also, the consequence of this immobility of factors internationally is that returns to factors tend to equality within, but not between countries.

**Natural Endowments.** Differences in advantages of trade to different countries may arise because of natural causes like geographical and climatic conditions. These lead to territorial division of labour and localization of industries. For instance, some countries may have particular mineral resources like coal, iron ore, copper, etc. Others may have land or climate peculiarly suitable for certain crops, e.g. jute in Bengal. Either these advantages cannot be transferred to other countries at all or the cost of moving them is prohibitive.

**Human Capabilities.** Countries differ in human capabilities too. People in some countries are phy-



sically more sturdy, whereas in others they are intellectually superior. Some have greater skill and dexterity and others excel in spirit of enterprise and organisational ability.

**Stock of Capital.** Some countries possess large stock of capital goods like the U.K., and the U.S.A. and others like India suffer from capital deficiency. This makes a great difference in the type of goods produced in different countries.

**Political Sovereignty.** In international trade, certain problems arise out of the fact that countries are independent sovereign States and can pursue independent policies with respect to the movement of goods, wages and prices, fiscal matters, banking law, foreign loans, etc. Several kinds of restrictions may be placed on the movement of goods beyond their frontiers by the States.

**Currency Systems.** Different countries have different currency systems. This hampers smooth flow of trade as between one country and another. A number of foreign exchange problems arise in foreign trade which are non-existent in internal trade. To the man in the street this is the main difference between international and domestic trade. Really, it is not the different currencies so much as the possibility of change in their relative values which differentiates between international trade from inter-regional trade.

**Separate Markets.** There are cultural distinctions between markets. The national markets are frequently separate from one another. For instance, the British use right hand drive cars, whereas the French use the left hand drive. Thus, the markets for automobiles are effectively separated. But markets are also separated by language, customs, usage, habits, tastes and host of other causes of difference. Standards differ. Some goods are designed in inches, feet and short tons and others in metric measurements. "Export and import trade must get outside of the culture of the domestic market to become acquainted with different goods, described in different words, using differing measurements, bought and sold on different terms, for different currency units."

**Economic Nationalism.** Different countries have their separate national economic life. "Along with political independence has grown a demand for economic self-reliance, self-esteem expressed largely in plans and hopes for economic development." The national units have been striving for increasing consumption, production, capital formation, etc. Thus, political and economic nationalism is rising especially in newly independent countries widening the differences between international and inter-regional trade.

**Trade and Exchange Controls.** We find that trade and exchange controls are instituted by almost all modern States which obstruct the movement of goods and services from one country to another. This also necessitates a separate theory of international trade.

All these differences give rise to a separate theory of international trade.

## THE BASIS OF INTERNATIONAL TRADE

The fundamental basis of international trade lies in the fact that countries are endowed by nature with different elements of productive power. In other words, factor endowments are unevenly distributed among the countries of the world. This is due to geographic facts, physical features and climatic differences. Some countries have the monopoly of certain minerals, e.g., Africa in gold and diamonds and oil resources in Arab countries; other countries are climatically best suited for the production of certain crops, e.g., Bengal and Bangla Desh for jute.

Thus, international trade is inevitable when there are marked differences in the countries regarding materials, natural vegetation, climate, soils and other physical and geographical conditions.

International trade is also affected by several other factors besides the natural or geographical factors, e.g., stage of economic development, accumulation of capital by a nation and its foreign investments, technological progress, trade and financial regulations, political affiliations, and so on.

## CLASSICAL THEORY OF INTERNATIONAL TRADE

Let us briefly review the historical background of the theory of international trade propounded mainly by Adam Smith and Ricardo, the principal exponents of the classical school of economics.

The economic philosophy that prevailed during the 17th and 18th centuries was that of Mercantilism. The main feature of the mercantilist doctrine was that a country could grow rich and prosperous by acquiring more and still more precious metals especially gold, and, therefore, all the efforts of the State should be directed to such economic activities as help a country to acquire more and more precious metals. According to the mercantilist school of economists, if international trade is not properly regulated then people might exchange gold for commodities of daily use or required for a luxurious living to the depletion of the stock of precious metals with the nation. Thus, exports were viewed favourably so long as they brought in gold but imports were looked at with apprehension as depriving the country of its true source of riches, i.e., precious metals.

Adam Smith and Ricardo strongly repudiated the mercantile notions of international trade.

1. Kindleberger, C.P.—*International Economics*, 1963, p. 10.



## THE THEORY OF ABSOLUTE ADVANTAGE

Adam Smith argued that a country could certainly gain by trading with other nations. Just as a tailor does not make his own shoes but exchanges a suit for shoes, and hence both the tailor and the shoe-maker gain by trading, in the same manner, Smith argued that a country as a whole would gain by having trade relations with other countries. According to Smith, if one country has absolute advantage over another in one line of production, and the other country has an absolute advantage over the first country in another line of production, then both countries would gain by trading.

For example, if it takes 10 units of labour to produce one unit of good X in country A, but 20 units of labour to produce the same good in country B, and if it takes 20 units of labour to produce one unit of good Y in country B and 10 units of labour to produce the same good in country A, then both the countries will gain by trading. After the opening of trade, country A will specialise in the production of good X, while country B will specialise in the production of Y.

### THE THEORY OF COMPARATIVE COST

Ricardo agreed with the analysis of Smith that international trade would be of mutual advantage if one country has absolute advantage over another in one line of production and the other country has an absolute advantage over the first country in another line of production. But Ricardo went further and argued that any two countries can very well gain by trading even if one of the countries is having an absolute advantage in both the goods over another, **provided the extent of absolute advantage is different in the two commodities in question, i.e., comparative advantage is greater in respect of one good than in that of the other.** In other words, when there are comparative differences in costs.

Let us take a numerical example.

**Comparative Differences in Costs.** When the comparative advantage is different, trade will arise and it will continue. Suppose that

|              |   |   |
|--------------|---|---|
| In Country A | { | Marginal cost of producing wheat is Rs. 70 a qtl.   |
|              | { | Marginal cost of producing cotton is Rs. 140 a qtl. |
| In Country B | { | Marginal cost of producing cotton is Rs. 70 a qtl.  |
|              | { | Marginal cost of producing wheat is Rs. 50 a qtl.   |

In this case, country B can produce both wheat and cotton cheaper than country A. But the comparative advantage is higher in the production of cotton

than in that of wheat. On the other hand, A has a comparative disadvantage in the production of both the commodities but the disadvantage is lower for wheat than for cotton.

Thus:

Country A:

1 qtl. of wheat =  $\frac{1}{2}$  qtl. of cotton      1 : 2

Country B:

1 qtl. of wheat =  $\frac{5}{7}$  or .71 qtl. of cotton      1 : 1-2/5

Cost Ratio

It will, therefore, pay country B to specialise in the production of cotton and A in wheat.

**Gain with Comparative Differences in Costs.** In this case, a surplus arises with specialization.

#### Without Specialization:

A = 1 quintal of wheat + .50 quintal of cotton.

B = 1 quintal of wheat + .71 quintal of cotton.

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A + B = 2 quintals of wheat + 1.21 quintals of cotton.

**With specialization,** A producing wheat and B producing cotton only:

A = 2 quintals of wheat.

B = 1.42 quintals of cotton.

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A + B = 2 quintals of wheat + 1.42 quintals of cotton.

Surplus = .21 quintal of cotton.

This is the gain from trade.

**Size of the Gain.** The total gain from international trade depends upon the differences in the cost ratios in the two countries. The larger the range between the comparative costs the greater the total gain. In the words of Harrod:

"A country gains by foreign trade if and when the traders find that there exists abroad a ratio of prices very different from that to which they are accustomed at home. They buy what to them seems cheap and sell what to them seems dear. The bigger the gap between what to them seems low points and high points, and the more important the articles affected, the greater will the gain from trade be."<sup>2</sup>

**Sharing the Gain.** As regards the share of this gain accruing to the parties, this will depend also upon the terms of trade, i.e., the ratio in which wheat exchanges for cotton in our example for instance. This ratio, as we have explained, depends upon the elasticities of the demand of one country for the goods of the other, or the intensity of reciprocal demands. Whoever is more keen to purchase or sell will be the loser in the bargain.

**What will be the terms of trade?** B will gain as long as she can get a quintal of wheat by parting

2. *International Economics*, p. 34.



with less than .71 quintals of cotton. A will gain as long as she can get more than .50 quintal of cotton by parting with a quintal of wheat. The rate of exchange will lie between

1 quintal of wheat = .05 quintal of cotton.

1 quintal of wheat = .71 quintal of cotton.

The actual rate will depend upon the relative elasticities of demand of each party for the goods of the other.

If the demand of A for cotton is more elastic than the demand of B for wheat, the rate of exchange will be more favourable to A. This is so because A will be less anxious for cotton than B is for wheat. In the opposite case, the rate of exchange will be more favourable to B.

When the rate of exchange is favourable to A, it is nearer the 1 quintal of wheat = .71 quintal of cotton limit. When the rate is favourable to B, it is nearer the 1 quintal of wheat = .50 quintal of cotton limit.

The margin of gain in this example is quite narrow. In actual practice, trade will arise if the margin is fairly wide to counterbalance any inconvenience involved in such a trade.

The argument here relates to two countries and two commodities but it can be extended to cover more than two commodities and to more than two countries without invalidating the essential principle.

We may sum up the theory of comparative cost in general terms. An individual is able to perform many tasks but he does not perform them all. He selects that work which pays him the most. A doctor can also do the dispensing but he does not do it; a lawyer can perhaps type, but he does not do it; a professor can teach his son reading in a school but he does not do it. All these people find it to their advantage, and it is also to the advantage of the community, that the inferior work is left to inferior persons. In that case, time and energy are more profitably employed.

The same principle works in international trade. Considering climatic conditions, distribution of mineral and other natural resources, geographical position and physical configuration, every country seems to be better suited for the production of certain articles rather than for others. It will be to the advantage of each country, as well as to the advantage of the world as a whole, that each country specialises in the production of those commodities for which it has greater relative advantage. In that case, the productive resources of the countries concerned will be more remuneratively employed.

Among the factors that determine the commodities in which a country should specialise, we may mention the rate of exchange, the monopoly element, transfer costs, prices of the factors and their relative efficiency. A country would tend to specialise in the production of those commodities in

which transfer costs and factor prices are low but productive efficiency is high.

**A Paradox.** The application of the theory of comparative cost may give rise to a paradoxical situation. A country may specialise in the production of certain commodities and import certain other articles, even though it can produce them at a lower cost than the country from which it imports them. For instance, England imports dairy products from Denmark although their cost of production in England is less. The reason is that England is able to get much better return from labour and capital employed in other directions, say, machinery, and the loss from the purchase of cheese and butter is more than made up.

"The theory of comparative costs as applied to international trade is, therefore, that each country tends to produce not necessarily what it can produce more cheaply than another country, but those articles which it can produce at the greatest relative advantage, *i.e.*, at the **lowest comparative costs.**"

#### Limitations

Like other economic laws the principle of comparative cost is also a statement of a tendency. In actual practice, the operation of the theory is hindered by frictional influences such as differences in language, custom, religion and above all the unwillingness of labour and capital to be guided by purely economic considerations. They are also influenced by political motives, commercial practices and general security. The cost of transport and the behaviour of the cost of production are the other limiting factors. Specialisation tends to increase the scale of production, but if the industry is subject to the law of increasing cost, the principle of comparative cost will cease to function.

#### Assumptions

The comparative cost theory is based on the following assumptions:

(i) Cost of production consists of labour costs only since labour is regarded as the sole factor of production.

(ii) The cost ratio between the two goods is assumed to be constant since production is considered to be subject to the law of constant returns.

(iii) It is assumed that within a country the factors of production have perfect mobility, whereas between different countries they are perfectly immobile.

(iv) There are no restrictions whatsoever on the movement of goods from one country to another. That is, it is assumed that there exists free and unfettered trade between the countries concerned.

(v) The theory is based on the quantity theory of money since it is assumed that if a country receives more money for its goods than it pays, the price level there will go up.



These were some of the assumptions on which the classical theory (or the comparative cost theory) of international trade was based and propounded.

### Criticism of the Comparative Cost Theory

The comparative cost theory is unrealistic since it is based on assumptions the validity of which can be questioned.

The comparative cost theory has been criticised on the following grounds:—

(i) **Assumption of Constant Cost.** The theory is based on the assumption of constant costs. The classical economists were of the opinion that in accordance with the law of constant unit costs, additional quantities of a commodity could be obtained with the same expenditure of labour per unit as previously. But this is not a valid assumption, since beyond a point the law of increasing or decreasing costs operates. The cost ratios are bound to change when specialisation between the two countries has gone apace.

(ii) **Some Static Assumptions.** The comparative cost theory is based on static assumptions of fixed tastes, identical production functions between trading countries and fixed supplies of land, labour, capital, etc. It cannot apply to the real world which is dynamic. The static world no longer exists. Tastes change owing to demonstration effect; technology is altered by innovation; factors also change. With changing technology and factors, it is impossible to calculate comparative costs.

(iii) **No Transport Cost Assumption.** The comparative cost theory also ignores transport costs. When transport costs are introduced, it no longer follows that the price ratios between export and import goods are the same in the exporting and importing countries. Export goods must be lower in price to overcome transport costs; import goods higher. If transport costs are wider than price differentials in the absence of trade, trade cannot take place. That is why many goods and services do not enter into international trade.

(iv) **Labour Costs Assumption.** The great weakness of the theory springs from the fact that it assumes that there are no other costs except labour costs. It ignores altogether other costs like cost of raw materials, cost of capital, i.e., interest and other fixed costs like rent. This makes the theory utterly unrealistic. Money, rather than labour alone, could well form the basis of comparative cost theory. The problem of international trade can be easily and satisfactorily explained in terms of prices.

(v) **Assumption of Perfect Mobility Inside and Immobility Outside.** The comparative cost theory makes a very big assumption, viz., that factors of production are perfectly mobile inside a country but perfectly immobile between one country and another. However, the development of cheap, quick and safe means of transport and communication has

broken down this immobility. As Bertil Ohlin points out, this assumption does not accord with reality. Even within the same country, there is no freedom of movement of the factors of production as is supposed, especially in the case of a big country, and as between countries the factors are not altogether immobile.

Besides being based on the unrealistic assumptions mentioned above the comparative cost theory can be criticised on several other grounds as explained below.

(vi) **Complete Specialisation Not Always Possible.** It may be possible for a small country to specialise in the production of one commodity or a few commodities. But it is simply out of the question for a big country like India, the U.S.A. and the U.S.S.R. to specialise. Even industrially advanced small countries like the U.K., Germany and Japan do not specialise. Thus, again the theory, though looks plausible, is not realistic.

(vii) Differences in comparative costs arise because of the fact that different countries have different factor endowments and because different commodities are best produced with a predominance of one or another factor. **Trade is said to arise out of differences in relative factor prices, but trade also tends to narrow these differences.**

(viii) Differences in factor endowments explain the movement of goods between tropical regions and temperate zones, between densely populated industrial countries and sparsely populated agricultural countries. **But trade may also flourish between countries with similar factor endowments, e.g., industrialised countries, owing to differences in comparative costs produced by historically increasing returns.**

(ix) The comparative cost theory concerns itself with one side of the question only, i.e., the supply side. It only tells us what goods a country will buy and sell. It does not tell us at what prices will these goods be traded. For that purpose, a study of the demand side is essential. Ricardo said that the law of comparative cost determines what commodities would be bought and sold in foreign trade. Mill explained that the law of reciprocal demand set the prices at which they would be traded. But it is not correct to separate demand and supply sides of international trade like this. **In general equilibrium theory, both demand and supply together determine the quantities of goods bought and sold as well as their prices.** We are reminded here of Marshall's analogy of the pair of scissors where demand and supply are compared to upper and lower blades.

(x) Actually, the trade between two countries may be dictated by strategic or military considerations and not by comparative costs. For these reasons, a country may deliberately attempt to encourage production of a commodity, even though it may have no special advantage in its production.



(xi) According to Bertil Ohlin, the comparative cost theory is dangerous. It takes only two countries and two commodities and applies uncritically the generalisations so obtained to world at large. It is thus unrealistic.

### MODERN THEORY: GENERAL EQUILIBRIUM THEORY

The modern theory of international trade is an extension of the general equilibrium theory of value. This analysis known as the 'factor-proportions-analysis' has been given by Bertil Ohlin and it has replaced the traditional comparative cost theory.

We know that the price of a commodity is determined by the demand for and supply of it, i.e., the preferences and incomes of consumers, on the one hand, and production possibilities, on the other. At the point of equilibrium the demand and supply will be equal to each other and also the price of the commodity equals its cost of production per unit.

The cost of production is composed of the prices paid for the factors required for the production of the commodity. These factor prices determine the consumers' incomes from which arises the demand for the commodity. Ohlin thus points out the mutual interdependence of prices of the commodities, the prices of the required factors, the demand for the commodity as well as the demand for and supply of the factors.

Just as individuals specialise in some economic activity or activities in which they have comparative advantage on the basis of their talents and aptitudes, similarly countries specialise in the production of certain commodities in which they have comparative advantage on the basis of factor endowments. Just as differences in individual capabilities is the cause of exchange between individuals, similarly difference in factor prices<sup>3</sup> is the cause of inter-regional or international trade. The analysis which is applicable to a single market in a region or a country, Bertil Ohlin extends to the determination of values internationally or to exchange between different regions or countries.

Thus, Ohlin observes: "International trade is but a special case of inter-local or inter-regional trade." Hence, according to Ohlin, there is no need to have a separate theory of international trade. He says that the same fundamental principle holds good of all trade, whether it is trade between individuals of the same country or between different nations. The classical theory of comparative cost is based on the assumption of comparative immobility of the factors of production between different countries. But Ohlin points out that this immobility is to be found even between two regions of the same country.

According to Ohlin, the immediate cause of international trade is the difference in commodity prices which in turn is due to the differences in factor prices. Goods are purchased from outside

because it is cheaper to buy them from outside. The establishment of a rate of exchange between the two countries facilitates the comparison between the commodity prices prevailing in the two countries.

Thus, in Ohlin's opinion, there are no fundamental differences but only quantitative differences between inter-regional and international trade.

We may summarise the main points of Ohlin's theory as follows:<sup>3</sup>

1. International trade is a special case of inter-regional trade. Thus the terms 'inter-regional' and 'international' trade can be substituted for each other. (For, in a country there may be many regions, and sometimes two or more countries may form only one region geographically).

2. Heckscher-Ohlin approach is based on two suppositions:

- (i) Products differ in factor requirements.
- (ii) Countries differ in factor endowments.

3. The immediate cause of international trade is the difference in relative commodity prices in the two regions.

4. Differences in relative commodity prices arise due to differences in factor prices and the different proportions of various factors required for producing different goods.

5. Differences in factor prices are caused by differences in factor endowments and their relative scarcities in the two regions.

6. When rate of exchange is established, relative price differences are translated into absolute price differences. This will indicate which of the factors are cheap and which dear in each region and, therefore, in what commodities each region should specialise. Evidently, a capital-abundant country will tend to specialise in capital-intensive products and shall export some of them to import labour-intensive goods. Likewise, a labour-abundant country will specialise in labour-intensive products and shall export some of them in order to import capital-intensive goods.

7. Since factors of production are immobile between two countries, free mobility of commodities in international trade, according to Ohlin, can serve as a partial substitute for factor mobility.

8. Further, free trade will also lead to a partial equalization of relative (and absolute) factor prices. Due to transport costs and other impediments in practice, a complete factor price equalization is improbable.

This theory is applicable to any number of regions without affecting its conclusions. Even if the regions are identical as regards factor endowments it will still

3. Mithani, D.M., *Introduction to International Economics*, 1972, pp. 124-25.



be profitable for them to enter into international exchange because extension of the market would offer them economies of scale. The qualitative differences in the factors of production facilitate their classification for the purpose of international comparison. Ohlin takes into full account transport costs and relative scarcities of the factors of production to determine international price relationship. He points out barriers to inter-regional mobility of productive factors. He also explains how factor movements can take the place of movement of goods.

Most economists accept the classical theory of international trade as stated by Haberler, a German economist, in terms of opportunity cost.

### Criticism of Heckscher-Ohlin's Theory

The following points of criticism have been offered against Ohlin's 'factor-proportions' theory:—

(i) Ohlin's theory is criticised on the ground that since it is based on over-simplified assumptions, it is unrealistic. But, as against this, it may be pointed out, the simplified assumptions have been taken to make it easily understandable, otherwise the theory holds good even in situations where these assumptions are absent.

(ii) Haberler has pointed out that although Ohlin's theory is more realistic, yet it remains a partial equilibrium analysis. Ohlin has failed to develop a comprehensive general equilibrium analysis.

(iii) One assumption underlying Ohlin's theory is that relative factor prices reflect relative factor endowments. This gives undue importance to supply and attaches less importance to demand. But we know that the demand conditions also explain the basis of international trade.

(iv) Also, it may be pointed out that if demand conditions are given due weight, the commodity price-ratios may not correspond to cost ratios.

(v) The critics have also urged that differences of relative factor endowments (which is the very basis of Ohlin's theory) are only one of the several explanations for the commodity price differences of the internationally traded goods. Differences in production techniques or in factor qualities, consumers' demand, etc., are also important in this connection.

(vi) It is also said that the prices of commodities are not determined by factor costs, but it is the other way about. That is, the prices of the factors of production (e.g., the raw materials) are determined by the prices of final goods paid by the consumers.

Various empirical studies have been conducted by economists like Leontief, MacDougall, Karvis and Balassa. While the findings of some have supported the Heckscher-Ohlin Theory, others did not find

enough basis to do so. For example, Prof. Leontief tested the Heckscher-Ohlin theory with the help of an input-output table for the United States for 1947. By common consent, the U.S.A., is one country that is abundantly endowed with capital. Therefore, one would expect the U.S.A., to export capital-intensive and import labour-intensive goods. However, the findings of Leontief are that the U.S.A. also exports labour-intensive goods and does import capital-intensive goods.

The findings of Leontief have also been supported by Prof. B. S. Minhas, on the assumption that factor reversal exists. The meaning of factor reversal is that at a certain set of factor prices, one good is labour-intensive, whereas at another set of factor prices, the same good is capital-intensive. With factor reversals, it is understandable that a capital-rich country may export labour-intensive goods and a labour-abundant country may export capital-intensive goods.

The differences in comparative cost ratios may also be caused by other factors, when there are differences in factor qualities or production technique in the trading countries. The Heckscher-Ohlin theory assumes that the factors of production are of the same quality, which is rarely so.

**Conclusion.** In spite of all the shortcomings pointed out above, Ohlin's theory offers a crucial explanation, nay the best of all possible explanations, of the basis of international trade.

### Comparison between the Classical Theory and Ohlin's Theory

Ohlin's theory departs from the classical (Comparative Cost Theory) in the following respects:

(i) It seeks to explain the phenomenon of international trade in terms of general theory of value rather than the Labour theory of value.

(ii) Unlike the classical theory, Ohlin's theory asserts that there is no need for a separate theory of international trade.

(iii) Ohlin's theory is a type of location theory and stresses the space element. It is simply the multiple market theory of pricing. Hence it is more realistic than the highly abstract classical theory of comparative costs.

(iv) Since Ohlin's theory takes two or more factors of production into account, factor supplies become crucial determinant of comparative advantage. In the classical theory, only one factor—labour—is considered, hence factor supply aspect is rendered irrelevant.

Thus Ohlin's theory integrates factor markets into international trade theory.

(v) The classical theory seeks to establish the welfare propositions of the international trade theory. On the other hand, Ohlin's theory represents



a contribution to positive economics. It attempts a scientific explanation of the structure of international trade.

(vi) The classical theory laid emphasis on the quality of a single factor—labour. On the other hand, in Ohlin's theory it is the quantity of all factors and not their quality in different regions which account for the emergence of international trade.

(vii) In the classical theory, comparative advantage arises from superior skills or techniques. But this superiority may vanish when others have learnt the technique. Hence, international trade will come to an end. But Ohlin's theory asserts that international trade will always continue, because international trade arises from differences in relative commodity costs which are due to relative differences in factor prices and relative differences in factor requirements.

(viii) The classical theory does not explain why there are differences in comparative costs, but Ohlin's factor-proportions analysis is able to do so.

**Conclusion.** Thus, Ohlin's theory represents a real departure from the classical doctrine and is a great improvement thereon.

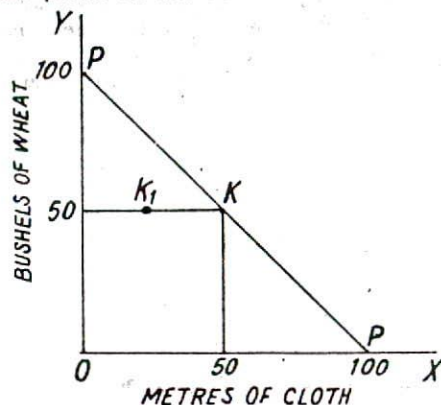
### THE THEORY OF OPPORTUNITY COST

The theory of absolute advantage and the theory of comparative cost has been based on the labour theory of value which has been widely criticized. Goods are not produced by labour alone, but by the various combinations of all the factors of production, *viz.*, land, labour and capital. Prof. Haberler restates the theory of comparative cost by taking two factors of production, *viz.*, labour and capital and in terms of opportunity cost. According to Haberler, each country exports goods which it produces at lower opportunity cost and imports those with higher opportunity cost.

The concept of the opportunity cost will be clear from the following example. Let us assume that the U.S.A. can produce either 100 bushels of wheat or 100 metres of cloth when all its factors of production are fully employed in the production of either wheat or cloth. It is a common knowledge, however, that a country is interested not only in the production of one good but a range of goods. Let us assume that the U.S.A. is interested in producing both wheat and cloth. The various combinations of both of these goods then can be shown with the help of a production possibility (PP) curve, also called transformation curve. The PP curve shows the combination of two goods that a country can produce with the help of all the resources at its disposal. The PP curve of the U.S.A., has been drawn in the following diagram (Fig. 55.1) on the assumption of constant returns to scale.

On the X-axis, the quantity of cloth while on the

Y-axis the quantity of wheat have been measured. All the points on this PP curve show the various



Production Possibility Curve of the U.S.A.

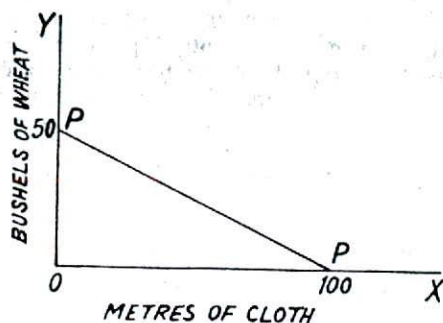
Fig. 55.1

combinations of cloth and wheat that the U.S.A. can produce with its resources. It should be noted here that it cannot reach a point in the commodity space outside this curve. The reason for this is that with the amounts of factors of production the country has, it can only produce some combination of goods indicated by the PP curve. The country can, on the other hand, produce any combination of goods represented by a point inside the curve, such as  $k_1$ . This is clearly an inefficient position because by moving further to point  $k$ , which is on the curve, the country can produce the same amount of wheat (50 bushels of wheat) as at  $k_1$  and a larger amount of cloth.

If the U.S.A. decides to produce at point  $k$ , it means that it chooses to produce 50 metres of cloth and 50 bushels of wheat. The PP curve here is a straight line, which shows that in order to produce one metre of cloth, the U.S.A. will have to give up the production of one bushel of wheat. This illustrates what is meant by opportunity cost. The opportunity cost, therefore, of a particular commodity say X, is the benefit of opportunity lost if X is instead put to its best alternative use. In the above example, the U.S.A. can produce either 100 bushels of wheat or 100 metres of cloth, so that opportunity cost of cloth in terms of wheat is 1:1. In other words, this means that in order to have one additional unit of cloth, the U.S.A. will have to forego one unit of wheat.

Similarly, the PP curve of another country, say the U.K., can also be drawn. Let us say the U.K. can produce either 100 metres of cloth or 50 bushels of wheat with given resources. The opportunity cost of cloth in terms of wheat in the case of the U.K., in that case, will be 100:50. In other words, it means that in order to have one additional unit of cloth it will have to forego  $\frac{1}{2}$  unit of wheat. The PP of the U.K. has been drawn in the following diagram (Fig. 55.2).





Production Possibility Curve of the U.K.

Fig. 55.2

For the U.S.A., the opportunity cost of wheat in terms of cloth is 1:1. For the U.K., the opportunity cost of wheat in terms of cloth is  $1\frac{1}{2}$ . Trade will benefit both the nations so long as the rate of exchange between wheat and cloth lies between

1 unit of cloth: from  $\frac{1}{2}$  unit of wheat to 1 unit of wheat.

From the above data, it can easily be concluded that between the two countries, wheat will be relatively cheaper in the U.S.A., and cloth will be relatively cheaper in the U.K. This is because of the fact that in order to have one additional unit of wheat, the U.S.A. has to forego one unit of cloth, whereas the U.K. has to give up 2 units of cloth. On the other hand, in order to have one additional unit of cloth, the U.S.A. has to give up one unit of wheat, whereas the U.K. has to give up  $\frac{1}{2}$  unit of wheat. This clearly means that the U.S.A. has a comparative advantage in the production of wheat and the U.K. has a comparative advantage in cloth. Therefore, the U.S.A. will export wheat and import cloth, while the U.K. will export cloth and import wheat. By doing so, both the countries gain. The gains from trade can be illustrated with the help of the following Fig. (Fig. 55.3). This Fig. (Fig.

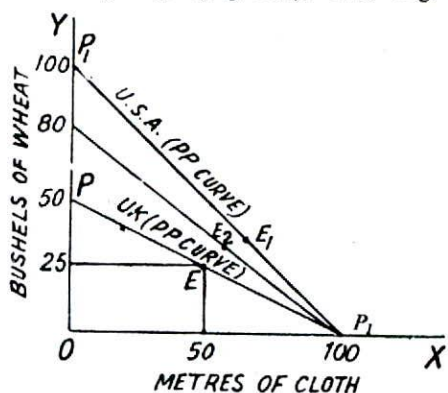


Fig. 55.3

55.3) shows the PP curve, of both the U.K. and the U.S.A. On the X-axis, the quantity of cloth and, on the Y-axis, the quantity of wheat have been mea-

sured.  $P_1P_2$  and  $P_3P_4$  are the production possibility curves of the U.K. and the U.S.A. respectively.

Let us assume that the U.K. chooses to produce at  $E_2$  before the opening of trade. At  $E_2$  it will produce and consume 50 metres of cloth and obviously, 25 bushels of wheat. After the opening of trade, it will produce and specialise in cloth only and import wheat from the U.S.A. Within the U.K., 50 metres of cloth were equal to 25 bushels of wheat, but from the U.S.A., it can have 50 bushels of wheat by parting with 50 metres of cloth (because the opportunity cost of cloth in terms of wheat is 1:1 in the U.S.A.). This means that after the opening of trade, the U.K. will move from  $E_2$  to  $E_1$ , which is clearly a better position than  $E_2$ .

Here, of course, we are assuming that the U.S.A. is exchanging wheat for cloth at 1:1 price. If this is so, then there seems to be no gain for the U.S.A. by trading with the U.K. But in the real world, it will not be so. The actual terms of trade will be determined by the demand and supply conditions of both the countries. The terms of trade will fall as explained earlier between 1 unit of cloth =  $\frac{1}{2}$  unit of wheat or 1 unit of wheat. Let the new terms of trade to be 1 unit of cloth = .8 unit of wheat, which means 100 units of cloth = 80 units of wheat. At this rate, the U.K. will get from the U.S.A. 40 bushels of wheat in return for its 50 metres of cloth. In the above diagram, the U.K. will reach  $E_1$  instead of  $E_2$ . This reduced share of the U.K. in the gain is the gain of the U.S.A.

### Comparative Cost Theory and the Opportunity Cost Theory Compared

Firstly, in the case of the opportunity cost theory, the differences in labour cost between the trading partners are not measured by the absolute amount of labour but by the alternatives foregone.

Secondly, the opportunity cost approach recognises the existence of many different kinds of productive factors as compared with comparative cost theory which takes into account only one factor of production, viz., labour and hence clearly is a major step forward from Ricardo's simple theory.

Thirdly, the opportunity cost theory shows that even if we discard the labour theory of value on which the Ricardian theory of comparative cost is based, and rely on opportunity cost theory, the conclusions of comparative cost theory are still valid: Countries will specialize in the production of those goods in which they have a comparative advantage and will import those goods in respect of which they are in a position of comparative disadvantage.

Fourthly, while the Ricardian theory of comparative cost is based on the unrealistic assumption of constant returns to scale, the opportunity cost theory is equally valid in the case of increasing/decreasing cost too. The production and trade taking place



under conditions of increasing cost help in explaining the fact that a country may depend upon its own production for part of its own supplies and on foreign markets for the remainder of its output.

The Ricardian theory of comparative cost explains that international trade arises because of differences in comparative cost of the commodities produced. The theory of opportunity cost explains that international trade arises because the PP curves of the various countries differ. But these theories do not fully explain why comparative cost ratios or PP curves between the trading countries are different. The answer to this question was supplied by Heckscher, a Swedish economist, in 1919 and elaborated by his pupil Bertil Ohlin. The reason for this, according to them, is twofold: Firstly, different goods require different factor inputs. Secondly, different countries possess different factor endowments. By factor endowments is meant the nature, quality and quantity of different factors of production with which a country is endowed. In Ricardian theory, how much of a good a country could produce depends on how much labour a country has. Hence, total working labour force was regarded as the total factor endowment. But in the Heckscher-Ohlin model factor endowments comprise of two factors of production, viz., labour and capital. Some countries have ample capital and others have ample labour. According to them, the countries that are 'rich in capital' will export capital-intensive goods and the labour-abundant economies will export labour-intensive goods.

The terms 'rich in capital' and 'rich in labour' are not very precise so far. Two alternative definitions have been given for them. One of these definitions runs in terms of factor prices: country A is rich in capital as compared with country B, if capital is relatively cheaper in country A than in country B. The second definition compares over-all physical amounts of labour and capital: country A is rich in capital if the ratio of capital to labour is higher in country A than in country B. Ohlin, however, takes the first definition. According to this theory, country A is rich in capital if  $\frac{P_{CA}}{P_{LA}}$  is less than  $\frac{P_{CB}}{P_{LB}}$ , where

$P_{CA}$  and  $P_{LA}$  stand for the prices of capital and labour in country A and  $P_{CB}$  and  $P_{LB}$  for the prices of capital and labour in country B.

Hence, if  $\frac{P_{LA}}{P_{CA}} > \frac{P_{LB}}{P_{CB}}$ , country A will export labour-intensive goods and country B will export capital-intensive goods.

The following example will make the theory very clear. If country A is having abundance of labour but very little capital, then the price of labour will be lower as compared with the price of capital. This will result in lowering the prices of those goods which require more labour and less capital. Therefore, country A should produce and export those

goods which require more labour and less capital. On the other hand, if country B possesses plenty of capital but very little of labour, the price of capital will be lower as compared with the price of labour. This will result in lowering the prices of those goods which require more capital and less labour. Therefore, country B should produce and export capital-intensive goods.

### Assumptions

This theory is based on the following assumptions:

- (i) There are no transport costs.
- (ii) There is perfect competition in both commodity and factor markets.
- (iii) Factors of production are immobile between countries but freely mobile within them.
- (iv) There are constant returns to scale in the production of each commodity.
- (v) All production functions are homogeneous of the first degree.
- (vi) Production functions for different commodities are such as can be distinguished by factor intensity.
- (vii) There exist no barriers to international trade.
- (viii) Factors are of identical quality in the two countries.

## TERMS OF TRADE

### Three Main Concepts

There are several measures of terms of trade, each representing a different concept. The important measures among them are: (i) **Net barter terms of trade**; (ii) **Gross barter terms of trade**; and (iii) **Income terms of trade**. There are other measures too like single factorial and double factorial terms of trade, which, however, are not used frequently. The most widely used measure is the net barter or the **commodity terms of trade**. Now a word about these three important measures.

### Net Barter Terms of Trade

It is obtained by dividing the index of export prices by the index of import prices both indices expressed in percentages and the quotient thus obtained also expressed in percentage. In symbols it is  $\frac{P_x}{P_m} \times 100$ ; where  $P_x$  stands for the index number of export prices and  $P_m$  stands for the index number of import prices.

Let us take an example. If the index number of export prices of country A is 200 and index number of import prices is 100, then the net barter terms of trade will be equal to  $\frac{200}{100} \times 100 = 200$ . This means that the Net barter terms of trade of a country A have shown an increase of 100 per cent over the base



period. If the value of the Net barter terms of trade comes to lower than 100, that means that the terms of trade have fallen to that extent. From the point of view of a country, a rise in the net barter terms of trade is favourable because as a result of the rise, the country has now to pay a smaller quantum of exports in return for the same volume of imports or alternatively the same volume of exports for a larger quantum of imports.

### Gross Barter Terms of Trade

It is obtained by dividing the index of the physical quantity of exports by the index of the physical quantity of imports, all expressed in terms of percentages. In symbols,  $\frac{Q_x}{Q_m} \times 100$  where  $Q_x$  stands for the index number of quantity of exports, and  $Q_m$  stands for the index number of quantity of imports. If  $Q_x = 100$  and  $Q_m = 80$  then the gross barter terms of trade will be equal to  $\frac{100}{80} \times 100 = 125$  which means that the gross barter terms of trade have shown an improvement of 25 per cent.

### Income Terms of Trade

This is obtained by dividing the value of exports (Value index = Quantity index  $\times$  Price index), divided by the index of import prices. In symbols,  $\frac{Q_x \times P_x}{P_m} \times 100$

A rise in this index means that a country can obtain a larger volume of imports from its sale of exports in a given year relative to the base year.

### Factors on which Terms of Trade Depend

The following are the main factors on which the terms of trade of a country may depend:

- (i) Elasticity of demand and supply;
- (ii) Availability of substitutes;
- (iii) Size of demand;
- (iv) Rate of Exchange;
- (v) Production pattern of a country.

**Elasticity of Demand.** If the demand of a country for her exports is relatively less elastic as compared with her demand for imports, then the prices of her exports may be higher as compared with the prices of her imports. This will make the terms of trade favourable to that country. On the other hand, if the demand of a country for her exports is relatively more elastic as compared with her demand for imports, then the prices of her exports may be lower as compared to the prices of her imports. This would make terms of trade unfavourable to the country concerned.

**Elasticity of Supply.** If the supply of exports from a country is relatively elastic as compared with the elasticity of supply of its imports, then it is possible

that she may be able to enjoy favourable terms of trade. This is so because of the fact that she will be able to adjust her supply according to demand. She will not then allow the prices of her exportables to fall in case the demand of her products falls in the foreign markets.

**Availability of Substitutes.** A country may be able to enjoy favourable terms of trade, given the demand conditions, if the products exported by her do not have close substitutes. This is so because in case of the non-availability of the substitutes, the country may be able to sell her products at a higher price.

**Size of Demand.** The terms of trade of a country are also considerably influenced by the size of the effective demand. A highly populated country like India may be relatively in a stronger position to bargain over price for her imports. However, this factor is such as can cut both ways.

**Rate of Exchange.** A country may be able to have favourable terms of trade by appreciating the exchange value of her currency. This is because of the fact that the prices of her exports will become relatively higher as compared with the prices of her imports by currency appreciation. However, if the other country also appreciates her currency, then there would be no impact on the terms of trade of either country.

**Production Structure.** Production structure of a country also influences its terms of trade. If the country produces primary goods (e.g., food and raw materials), there is every possibility that the country may experience unfavourable terms of trade, for the reason that the demand for these products is normally declining with economic development. It is partly because of the operation of the Engel's Law, which states that as the income of a country rises, less is spent on food products, etc., and partly because of technological advances which usually are of the raw materials displacing or economising nature. In other words, the primary producing countries have usually to sell their products at falling prices. On the other hand, their main demand consists of industrial goods the demand for which is of a rising rather than falling nature and they have no option but to accept the prices dictated by their more advanced industrialised suppliers.

Raul Prebisch has shown that prices of primary products (of under-developed countries) deteriorated in relative terms (i.e., relatively to manufactured products) which means a reduction in the export earnings of the countries producing such goods. That is, the under-developed countries have not benefited from international trade relatively to the exports of industrial goods (i.e., the developed countries). In other words, the gains from international trade have not been equitably distributed between the developed and under-developed countries.



### Terms of Trade and Economic Growth

Terms of trade play an important role in the economy of a country. Improved terms of trade enable a country to import a larger quantity of goods from her trading partners in return for the same quantity of her exports or the same quantity of imports in exchange for a smaller quantity of exports. This greatly influences the income of the countries engaged in trade. Secondly, the terms of trade play a significant role in explaining changes in income differentials among countries. Changes in terms of trade may affect the international distribution of income and unfavourable terms of trade may provide some explanation for the low levels of income in developing countries.

The analysis of terms of trade is very important in the case of developing countries for a number of reasons: Firstly, the volume of international trade is generally very large in relation to their national income. Secondly, international trade is vital for them because it provides them with technical skills, plant, machinery, *etc.*, which are so essential for their economic development. These countries then will naturally be very much concerned with all aspects of their trading relationships, including their terms of trade. Any worsening of their terms of trade (particularly any change in export volume or productivity) other things being equal will reduce their capacity to import and shift income away from them, thus retarding their efforts to promote economic growth.

There are two views. The classical economists believed that the terms of trade would shift in the long run in favour of countries producing primary goods and against those producing manufactured goods. This is so because of the fact that primary products are subject to diminishing returns whereas manufactured goods obey the law of increasing returns. The net effect of this tendency would be an increase in the prices of primary products and a reduction in the prices of manufactured goods. This would in turn make the terms of trade of developing countries favourable.

Recently, however, a group of economists, *viz.*, Raul Prebisch, Singer and Myrdal are of the view that the terms of trade of developing countries tend to move against them. Their view, termed secular deterioration hypothesis, was based on the trend in the terms of trade of the U.K., from the latter part of the 19th century to the late 1930's. At the end of this period, a given quantity of primary products exported to the U.K., purchased 40 per cent less of manufactured goods than at the beginning. The main reasons for it given by them are as follows:

(i) The developed countries keep most of the gains of the increased productivity in manufactures by increasing wages and profits and not reducing

prices. Strong trade union organisations make sure that the gains in productivity are followed by wage-increases. On the other hand, growth in the productivity in primary products results in lower product prices. The result of this is unfavourable terms for the primary product producing countries, where there is practically perfect competition in the factor markets.

(ii) There has been a relative increase in the demand for manufactured goods produced by developed economies and decrease in their demand for primary products. This is partly explained by Engel's Law, which states that as income increases a small proportion is spent on food items. Their income elasticity of demand is thus lower for such items which are mainly produced and exported by developing countries, than that of the demand of developing countries for manufactured goods. Secondly, technological progress in manufactures has greatly reduced the demand for raw material used in manufactures. Therefore, Engel's Law coupled with technical progress in manufactured goods have worked together in causing a reduction in the total demand for the primary products, which in turn have shifted the terms of trade to the detriment of the developing countries.

(iii) It is argued that the prices of primary products rise and fall sharply in periods of both boom and depression thus losing all the gains of the boom periods. But the prices of manufactured goods do not fall in depression as much as they rise in boom periods, because of the presence of strong trade unions. As a result, there arises a wide gap between the prices of primary products and manufactured goods over successive cycles which in turn make the terms of trade of developing countries unfavourable in the long run.

Raul Prebisch has shown, as pointed out above, that the developing countries are handicapped in their attempts at economic development, since terms of trade are unfavourable to them relative to the developed countries. That is why they have to seek loans and grants from the developed countries. The terms of trade are unfavourable to the developing countries since their export earnings are derived from a few commodities only known as the traditional exports, *e.g.*, jute, tea and oilseeds in the case of India. The prices of such commodities do not rise as much as the prices of capital goods and other manufactured goods that they have to purchase. Prices of imported manufactures being relatively high and prices of primary goods exported being relatively low, the terms of trade are unfavourable to the developing countries. There is a secular decline in their terms of trade. Prof. Haberler has questioned this thesis of a secular decline. But Prof. Kindleberger supports Raul Prebisch and asserts that the terms of trade have been generally favourable to



well-developed countries and unfavourable to developing countries.

For economic development, the developing countries have to purchase from abroad machinery and capital equipment, essential industrial raw materials and technical know-how. But owing to the terms of trade being unfavourable to them they do not have adequate export earnings to be able to purchase their requirements of economic development. This is a great handicap.

In view of the above, we might say that economic development has not benefited the developing countries as much as the well-developed countries.

Thus, fair terms of trade are very important for the economic development of the under-developed countries. Favourable terms of trade enable a country to import a larger quantity of goods for the same quantity of exports or the same quantity of imports for a smaller quantity of exports. This is a potential source of capital formation. In Nurkse's words, "The great advantage of this potential source of capital formation is that it gives rise neither to foreign debt burden nor to the various frictions that may arise from inter-governmental loans and grants." Unfavourable terms of trade accentuate balance of payments and budgetary difficulties. It may, however, be emphasised that unless the additional resources made available by the favourable terms are turned into savings and investment, economic development will not be promoted. Favourable terms by themselves do not accelerate development automatically.

### GAINS FROM FOREIGN TRADE: STATIC AND DYNAMIC

Benefits from foreign trade arise from specialisation on the basis of comparative cost theory. It brings about improvement in production and promotes economic development. It prevents monopolies. It is beneficial to consumers by providing them new and cheap commodities. It also facilitates international payments. There is no doubt that the participating countries enjoy numerous benefits from international trade.

The gains from international trade can be broadly classified into **static gains** and **dynamic gains**. Static gains arise from optimum use of the country's factor endowments or resources in men, money and material, so that the national output is maximised resulting in increase in social welfare. Dynamic gains, on the other hand, refer to those benefits which promote economic growth of the participating countries. Now a word about these two types of gains.

#### Static Gains

As pointed out above, static gains result from the operation of the theory of comparative cost in the field of foreign trade. Acting on this principle, the

participating countries are able to make optimum use of their resources or factor endowments so that the national output is greater than it otherwise would be. This raises the level of social welfare in the country. Utility or welfare can be measured by indifference curves. We find that as a result of introduction or extension of foreign trade, the people can move to a higher indifference curve. This has been shown in Figs. 55.4 and 55.5. Take two countries *A* and *B* both producing wheat and cotton. Production possibility and indifference curves are shown in Figs. 55.4 and 55.5.

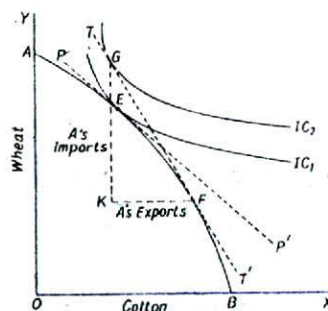


Fig. 55.4 Country A's Gain from Trade

It can be seen that, before the commencement of foreign trade, country *A* would be in equilibrium at the point *E* where the price line *PP'* is tangent to both production possibility curve *AB* and indifference curve *IC<sub>1</sub>*. The slope of the price line shows the price ratio or cost ratio of the two commodities in the country *A*; *TT'* is the terms of trade line showing the price ratio at which goods can be exchanged between these two countries, *TT'* i.e. terms of trade line is tangent to *A*'s production possibility curve *AB*. Fig. 55.4 shows that at *F*, *A* will produce more of cotton in which it has comparative advantage and less of wheat at *F* than at *E*. Taking the pattern of demand in the country *A*, we have the indifference curves *IC<sub>1</sub>* and *IC<sub>2</sub>* representing the demand for the two commodities. Now *TT'*, the terms of trade line, is tangent to *IC<sub>2</sub>* at *G* which shows the quantities of wheat and cotton consumed by the country *A*. It can be seen that as a result of introduction of foreign trade, the country *A* has moved from *E* on the indifference *IC<sub>1</sub>* to *G* on the indifference curve *IC<sub>2</sub>*, which represents a higher level of social welfare in terms of larger consumption of the two trade goods. This is called *Static Gain* resulting from specialisation brought about by the introduction of foreign trade. It can also be seen that the quantities of the two goods consumed and different from the quantities produced. The quantities produced are shown at *F* and quantities consumed at *G*. The difference is accounted for by exports and imports. The country *A* will be exporting *KF* quantity of cotton importing *KG* quantity of cotton.



The gain to country *B* can be similarly explained. See Fig 55.5. Production possibility curve of *B* between wheat and cotton is shown by the curve *CD*. It is clear that given the factor endowments, it is more profitable for *B* to produce wheat. The country *B* fixes her production and consumption at point *E* before the introduction of foreign trade. At this point, price ratio line *PP'* and indifference curve *IC<sub>1</sub>*, are tangent to production possibility curve *CD*. The country *B* would gain, from trade if it can sell at a price ratio different from *PP'*. Given the terms of trade line *TT'*, the country *B* will produce at *F* on its production possibility curve *CD*.

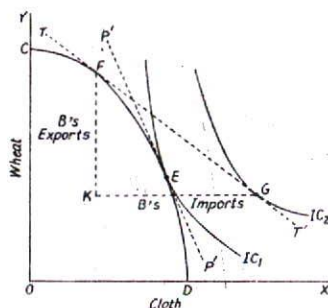


Fig. 55.5 Country *B*'s Gain from Trade

It can be seen from Fig. 55.5 that it will produce more of wheat in which it has comparative advantage and less of cotton in which it has comparative disadvantage. But given the price ratio as represented by terms of trade line *TT'*, *B* will consume the quantities of two goods as shown by the point *G* where the terms of trade line *TT'* is tangent to the indifference curve *IC<sub>2</sub>*. It is clear that specialisation resulting from the introduction of foreign trade has enabled the country *B* to move to the higher indifference curve *IC<sub>2</sub>* and thus consume more of the two goods. This is her gain from international trade. The country will now export *KF* quantity of wheat and import *KG* amount of cotton. It may be borne in mind that in the case of constant opportunity cost, each country resorts to complete specialisation i.e. producing only one of the two goods. On the other hand, in case of increasing opportunity cost, specialisation is not complete so that a country produces relatively larger quantity of the commodity in which it has comparative advantage.

#### Dynamic Gains: Foreign Trade and Economic Development

Apart from the fuller utilisation of the factor endowments resulting in increase in output (i.e. more of all goods) and improvement in social welfare which foreign trade brings to a country explained in the static gains above, international trade also brings to the participating countries what are known as *dynamic gains*. They relate to economic growth and development which results from the

introduction of international trade. Specialisation by different countries in producing commodities for which they are best fitted, according to the theory of comparative cost, results in a larger volume of production and improves productivity. This obviously promotes economic development. There is no doubt that extension of international trade has accelerated economic growth in the participating countries. As Professor Haberler observes, "International division of labour and international trade, which enable every country to specialise and to export those things which it can produce cheaper in exchange for what others can provide at a lower cost, have been and still are one of the basic factors promoting economic well-being and increasing national income of every participating country." As distinguished from static gains, which accrue to a country from mere re-allocation of a given amount of resources, dynamic gains accrue to a country in terms of promotion of its economic growth. Foreign trade has been described as "an engine of economic growth". (Robertson) Besides the static gains flowing out of the operation of the theory of comparative costs, some indirect benefits and gains also accrue to the participating countries which promote economic growth. These are known as *dynamic gains*.

Let us see how international trade promotes economic growth. International trade increases national income and facilitates saving and opens out new channels of investment. Increase in saving and investment is found to promote economic growth. Exports earn foreign exchange which can be utilised in buying capital and equipment and know-how from abroad which can serve as instruments of economic growth. The larger the national income and output, the higher will be rate of growth. The higher level of output enables a country to avoid the vicious circle of poverty and put the country in the 'take-off', or self-sustaining growth. Production possibilities and cost of production in different countries differ so widely that foreign trade brings to the participating countries tremendous gains in terms of national output and income.

Foreign trade promotes economic development in the following different ways.

(i) The under-developed countries are enabled by foreign trade to obtain in exchange for their goods capital equipment, machinery and raw materials which are highly useful in accelerating the rate of economic growth. Take the case of India. There was a time when she used to import manufactured goods but the pattern of her foreign trade has undergone a perceptible change so that instead of importing manufactured goods she is now importing large quantities of raw materials, capital goods, machinery and equipment.

(ii) Besides raw materials, machinery and capital equipment, international trade enables a country to



import technical know-how, technical skills, managerial talents and entrepreneurship through foreign collaborations. As Professor Haberler observes "Today the under-developed countries have a tremendous, constantly growing store of technical know-how to draw from" which is essential for economic growth.....Trade is the most important vehicle for the transmission of technical know-how.

(iii) International trade has brought about a tremendous movement of capital from the developed to the under-developed and developing countries. This the foreign trade does by facilitating the payment of interest or repatriation of capital which, in the absence of foreign trade, would have presented tremendous difficulties. The existence of a large volume of foreign trade serves as a guarantee for the payment of interest and the principal.

Thus, dynamic gains represent the contribution that foreign trade makes to the economic growth or development of an under-developed country.

#### FACTOR-PRICE EQUALISATION THEOREM

Factor-price equalisation Theorem is an important corollary from Heckscher-Ohlin theory of international trade. This theory assumes immobility of the factors of production as between different countries. Hence their prices in different countries must be different. But if we assume full mobility of these factors, then factor prices, like prices of goods, must be equal.

Obviously, when there is no trade between countries, prices of commodities in different countries must rule at different levels. But when trade channels are opened and international trade starts, there will be a tendency for the prices of internationally traded goods to equalise. Take two countries *A* and *B* producing wheat and cotton, respectively. Suppose wheat is cheaper in *A* and cotton is cheaper in *B*. Now suppose trade starts between these two countries. *B* will buy wheat from *A* which is cheaper there and *A* will buy cotton from *B* where it is cheaper. When *A*'s market is flooded with cotton from *B* and *B*'s market with wheat from *A*, the price of cotton will start falling in *A* and price of wheat in *B*. This will go on till the prices of the two goods are equalised in both countries. Thus in the absence of transport costs and tariffs, the effect of trade would be to equalise the prices of commodities in the countries participating in trade.

But what about the equalising of factor prices? The factors of production are not so mobile as between different countries as the goods. Their comparative immobility stands in the way of the equalisation of their prices. In modern times, however, even factors of production have acquired a degree of mobility. Also, the factors of production are after all embodied in the production of goods and we might say that movement of goods is a

substitute for the movement of the factors of production needed in the production of those goods. In this way, there is a tendency to equality of factor prices. Trade tends to equalise not only commodity prices but factor prices too. Besides, labour and capital have become fairly mobile. For instance, Indians are emigrating in large numbers to foreign countries where wages are high so that wages are going up in India on account of labour shortage.

Take two countries Great Britain and India. In Great Britain, capital is relatively abundant and cheap, whereas labour is relatively scarce and wages are relatively higher. In India, on the other hand, labour is abundant and relatively cheaper whereas capital is scarce and relatively expensive. With these factor endowments, it will pay India to export labour-intensive goods to Great Britain and import therefrom capital-intensive goods like machinery. The result will be that the demand for labour in India will increase and push up wages. Great Britain will concentrate on the production of capital-intensive goods and hence demand for labour there will decrease and wages will go down. In this way, the cost of labour in the two countries would approximate to each other. Similarly, demand for capital would go up in Great Britain because the demand for capital goods would increase. On the other hand, in India the demand for capital goods would decrease since they would be imported from Great Britain. Thus demand for capital would decrease in India, but increase in Great Britain. In this way, the rate of interest would tend to fall in India but tend to rise in Great Britain. Hence the rate of interest would tend to equalise.

Thus, according to Heckscher-Ohlin theory establishment of free trade between the two countries will result in the equalisation of factor costs. But how far this equality will be established will depend on the degree of mobility. However the movement of goods makes up for this immobility. Hence what would have been accomplished by the free movement of the factors of production is indirectly accomplished by the free movement of goods. In this way, according to Ohlin, *international trade in commodities serves as a substitute for international mobility of factors and equalises the factor costs.*

There are, however, certain assumptions on the basis of which equality between factor costs would be realised. It is assumed for instance, that (a) demand pattern or tastes are the same in the two countries, (b) supply conditions of the factors or technological progress should be almost the same, (c) production function of the commodities should be the same, (d) there are no restrictions in the free movement of goods (e) there are no transport costs and (f) perfect competition prevails both in the commodity market and factor market.



### Conclusion

These assumptions are quite restrictive and unrealistic. Hence in the real world perfect equality in the factor costs in different countries participating in international trade is unattainable.

### Consequences of International Trade

We have discussed above the various advantages and disadvantages of international trade. These constitute the good and bad effects of international trade. We shall mention here in a summary way some other effects:

(i) **Equalisation of Commodity Prices.** Obviously, one direct effect of international exchange of goods is to equalise the prices of similar goods in the trading countries. Absolute equality is, however, out of the question, because the transfer of goods must involve transport costs and other incidental expenses. There must, therefore, remain some difference in the prices of the internationally traded goods to compensate for these costs.

(ii) **Equalisation of Factor Prices.** Commodity prices in the ultimate analysis depend on the factor prices. Hence, equalisation of commodity prices must tend to equalise factor prices. The prices of relatively scarce factors will fall since the goods in which they are used will be imported and demand for such factors will diminish. On the other hand, there will be greater demand for the relatively cheap and abundant factors, for the goods in which they enter will be exported. Their price will, therefore, tend to rise. But complete equalisation cannot be expected.

(iii) **Equitable Distribution of Scarce Materials.** Nature has blessed some countries with some rare materials, e.g., oil in Arab countries, jute in Bangla Desh, gold in African countries. These scarce materials are equitably distributed among the countries of the world through international trade.

(iv) **Effect on Factor Supplies.** It is also possible that the fall in the prices of scarce factors may lead to contraction in their supply and rise in the prices of abundant factors may result in the extension of their supply. This may accentuate differences in factor supply of the two countries.

(v) **Specialisation and international division of labour** will be of mutual advantage to the trading countries. Not only will their standard of living rise but they will also progress economically and industrially. Their productive resources will be put to optimum use. Disadvantages arising from uneven distribution of factor endowments will disappear, although, it must be admitted that the gain accruing from international trade will not be distributed equally. Advanced countries will gain relatively more than the under-developed countries.

(vi) **International trade affects people's tastes and desires.** This means that demand for certain goods will increase and demand for some new goods will arise. In this manner, international trade will affect both the volume and the nature of demand.

These are a few important effects of international trade.



# 56

## FREE TRADE vs. PROTECTION

### THEORY OF FREE TRADE

A policy of no restrictions on the movement of goods between countries is known as the policy of Free Trade. Restrictions placed with a view to safeguarding home industries constitute the policy of protection. In the words of Adam Smith, the term 'free trade' has been used to denote "that system of commercial policy which draws no distinction between domestic and foreign commodities and, therefore, neither imposes additional burdens on the latter, nor grants any special favours to the former."<sup>1</sup> Free trade, however, does not require the removal of all duties on commodities. It only insists that they shall be imposed exclusively for revenue and not at all for protection.

Adam Smith wrote: "If a foreign country can supply us with a commodity cheaper than we ourselves can produce, better buy it from them with some part of the produce of our own industry, employed in a way in which we have some advantage." He continued further: "Whether the advantage which one country has over another be natural or acquired is in this respect of no consequence. As long as one country has those advantages and the other wants them, it will always be more advantageous for the latter rather to buy of the former than to make."<sup>2</sup> The only exception that Adam Smith would make was industries necessary for defence. These might be protected since defence is more important than opulence, he said.

The doctrine of free trade is the extension of the doctrine of division of labour to the international field. In the words of Adam Smith again, "Individuals find it for their interest to employ their industry in a way in which they have some advantage

over their neighbours." And he adds, "What is prudence in the conduct of every private family can scarce be folly in that of great kingdom." In short, the free trade theory is that such a policy enables every country to devote itself to those forms of production for which it is best suited on the basis of comparative advantages.

### Case for Free Trade

(For arguments in favour of Free Trade see advantages of foreign trade given in the previous chapter.)

### PROTECTIONISM

The term 'protection' is used to denote a policy of encouraging the home industries by the use of bounties or by the imposition of high customs duties on foreign products. The object is to build up great national industries even by sacrificing utilities on the part of existing consumers.

### Arguments for Protection

The main arguments that are usually advanced in favour of protection are discussed below:

(i) **'Infant Industry' Argument.** This argument was put forward by Friedrich List, a German economist, in 1840. In those days, Germany was making all-out efforts to industrialise its economy. On the other hand, the U.K. had already built, by that time, a sound industrial base. Germany was then facing lot of difficulties in competing with the more established British industry. List was of the firm view that the development of industries is a pre-requisite of economic progress. Free trade was good for Britain whose economic position was already well established. For young emerging German industry, however, protection of a tariff wall was essential. In the words of J.S. Mill, "The

1. Quoted by Palgrave in *Dictionary of Political Economy*, Vol. II, p. 143.

2. *Wealth of Nations*, Book IV, Ch. 2.



superiority of one country over another in a branch of production often arises only from having begun it sooner. There may be no inherent advantage on one part or disadvantage on the other, but only a present superiority of acquired skill and experience."<sup>3</sup>

Thus, J. S. Mill, one of the advocates of free trade, accepted only one argument in favour of protection, *viz.*, the infant industry argument. In Mill's words it ran thus: "A protective duty, continued for a reasonable time, might sometimes be the least inconvenient mode in which a nation can tax itself for the support of such an experiment (introducing new industries). But it is essential that protection should be confined to cases in which there is good ground of assurance that the industry which it fosters will after a time be able to dispense with it."<sup>4</sup> Alfred Marshall, the eminent English economist, too, conceded the force of the infant industry argument, although the English economists by and large advocated free trade. However, for protection to produce social benefits, an infant industry must first grow up. It must eventually be able to compete at world market prices. Not only has it to grow up, for a protectionist policy to be profitable, according to Sodersten, it will have to be able to pay back the losses due to protection during the infant industry period. Only then is there a clear-cut case for infant industry protection.

This argument specially applies to countries that enter the industrial field at a later stage. Such countries possess potential advantages which may not become effective unless foreign competition is excluded for a period of time. Unless an industry in its infancy is protected till it acquires strength and maturity, it will die in the face of foreign competition.

The infant industry argument rests on the following grounds: (a) Every country has its own potentialities for developing some industries in the form of labour skill, raw materials and entrepreneurial talent. No country is completely devoid of productive elements which may yet be latent.

(b) Every nation has the right to develop its potentialities or discover its latent productive powers. No nation would like its efforts for economic development to be smothered before it has had a full chance for trial and error.

(c) It takes time for the productive elements to be developed. Labour can be trained; raw materials can be improved; and entrepreneurs can become competent by experience. But they should have enough time to develop and discover themselves.

(d) Infant industries cannot be expected to withstand competition from old and well-entrenched industries. It will be unfair to expose new industries

to face cut-throat competition from fully developed industries.

(e) If infant industries are not duly protected against competition from strong and well-established industries, they are bound to die. This will mean waste of valuable national assets invested in the industry and a serious setback to entrepreneurial venture in future.

The 'infant industry' argument, however, has been refuted on two grounds: (a) that once an infant always an infant. Once protection is given, vested interests are created and it becomes almost impossible to withdraw it. (b) that all sorts of industries begin to claim protection once this basis is admitted. The result is political corruption.

In spite of these weaknesses, the argument has been widely accepted and many countries have industrialised themselves through protection given on the basis of this argument, *e.g.*, the U.S.A. and several members of the British Commonwealth, including India. But it is recognised that protection should not be given on a permanent basis. It should be given for a definite period considered sufficient for the industry to grow. Moreover, it should not be given indiscriminately to all industries. The industries to be given protection should be selected with proper care and discrimination so that scarce productive resources of the community are properly allocated.

(ii) 'Diversification of Industry' Argument. This argument was advanced, among other writers, by Frederick List in Germany. According to it, a nation should have a variety of sources of production and employment. Depending on one industry or on a few industries is dangerous both politically and economically. Politically it means too much dependence on foreign trade which may be cut off during a war. Economically, a country depending on a few industries is exposed to the danger of serious economic dislocation in case some adverse circumstances affect such an industry.

But it must be understood that this argument cuts at the root of the principle of comparative cost according to which each country must specialise in the production of certain articles. According to this argument a country must produce even those articles in which it may not have comparative advantage.

(iii) 'Employment' Argument. It is argued that industrial development through protection increases employment in a country. Conversely, if protection is not given to old established industries, foreign competition may ruin them and create unemployment in the country. The decay of the Indian handicrafts, during the 19th century, as a result of foreign competition, and the resultant unemployment and distress among the artisans, is a case in point.

Free traders meet this argument by saying that

3. *Principles of Political Economy*, Vol. II, pp. 537-38.

4. *Ibid.*, Book V, Ch. 10, Sec. 1.



protection does not increase total employment; it merely transfers employment to the protected industries at the expense of other industries. Conversely, if due to foreign competition, old industries have to disappear, the people so set free can move to export industries for which the country concerned possesses greater comparative advantage, or migrate to other lands.

This reasoning assumes that labour and capital can easily move from industry to industry or from one country to another. In actual practice, due to economic friction, this happens very slowly or may not happen at all. It also assumes that productive resources of the country are already fully employed, whereas, in a country like India, there is a chronic under-employment of such resources.

At any rate, the employment created in the protected industries is bound to offset any contraction of employment in the export industries so that there is net increase in employment in the country. It is very likely that some previously unemployed workers are able to find jobs in the protected industry.

Some economists are, however, of the view that protective tariffs are only short-term palliatives to cure temporary unemployment. For instance, frictional unemployment, which arises from the inability of the workers to adjust to the new industrial changes owing to lack of mobility on their part, may be absorbed in the protected industries temporarily. Similarly, tariffs can lessen temporarily cyclical unemployment arising out of depression. That explains that during the Great Depression of the early thirties, nearly all countries raised tariff walls. Also, chronic unemployment resulting from high real wages can to some extent be cured by means of tariffs. The late Lord Keynes advocated protection as a means of combating permanent mass unemployment for an economy which is 'neither in equilibrium nor in sight of equilibrium.'

But tariff is no panacea for unemployment of any type. Sectional unemployment can be cured by technical training of workers to equip them for other jobs. General permanent unemployment can be cured by technical progress to raise marginal productivity of workers and by lowering real wages and by economic development of under-developed countries. The cyclical unemployment may be expected to vanish at the full recovery of the economy from depression.

Hence, protection by itself cannot create employment. It is like medicine which cannot be made a daily food.

(iv) **'Conservation of National Resources' Argument.** Carey and Patten had argued that free trade resulted in the export of agricultural commodities from America and thus led to the exhaustion of the soil. Jevons in England applied the same argument against the export of coal which exhausted coal-

fields. The same argument has also been applied in the Union of South Africa regarding gold mining and in India regarding the export of manganese and mica.

The argument has some force. If a country exports its exhaustible materials in a raw state, it loses the manufacturer's profits. It may also be seriously handicapped when such materials have been altogether exhausted.

(v) **'Defence' Argument.** Adam Smith remarked, "Defence is better than opulence". It is said that it is essential to make a country militarily strong even though it may not be economically prosperous. Hitler preached to the German nation, "Guns are better than butter." According to this argument, a country must actively encourage the development of those industries which are essential from the point of view of defence, even though it may result in uneconomic distribution of the national resources.

The advocates of free trade point out that this is politics and not economics. On purely economic grounds, they say, free trade is the best.

(vi) **'Revenue' Argument.** Protection is also advocated for revenue purposes. When protective import duties are imposed, they certainly bring in revenue. Customs duties in India have been fairly productive.

But it may be pointed out that there is a certain degree of incompatibility between the revenue and protection. If full protection is given, the government will not get any revenue, because full protection will mean that our goods have driven out foreign goods altogether. When foreign goods do not come in, there will be no revenue from import duty. On the other hand, if we want revenue then foreign goods must come in and compete with our goods. Then our industries do not get any protection. This incompatibility, however, arises between **maximum** protection and **maximum** revenue. But if the duties are moderate, they will yield revenue besides affording protection. It is, however, much better to advocate protection for the sake of protecting industries rather than for raising revenues.

(vii) **'Key Industry' Argument.** If the industrial structure of a country is to be stable and sound, it must develop 'key' or basic industries; otherwise the foundation of industries will have been laid on sand. The country may not have any comparative advantage in such industries. But since they are of crucial importance and have to be developed, protection must be granted to them.

(viii) **'Balance of Payments' Argument.** It may become necessary to check imports by means of tariff in order to rectify an adverse balance of payments. The I.M.F. regulations permit the member countries to impose temporary restrictions on trade to cure a balance of payments deficit. Import restrictions on non-essential imports also become necessary in the interest of accelerated economic growth.



(ix) **'Patriotism' Argument.** Protection is advocated on patriotic grounds also. It is the duty of every citizen to use home-made goods as far as possible. We must, therefore, develop our industries, through protection, if necessary, so that home-made goods in the right quantity and of good quality are made available for use. There was a widespread Swadeshi sentiment in India in the first decade of the present century which gave Indian industry great stimulus.

(x) **'Self-sufficiency' Argument.** Another argument in favour of protection is that we should become self-sufficient and not depend on other countries for our necessities. Such a dependence proves very dangerous during war when foreign trade is cut off. This argument has a particular force in present times when war clouds are constantly threatening overhead.

(xi) Protection also becomes necessary **against unfair competition** from abroad arising from dumping, depreciated exchanges, bounties, etc.

(xii) **For Economic Stability.** Protection is also advocated to shut out the baneful influences of trade cycles from abroad. It is expected to make the domestic economy immune from the destabilising effects of external disturbing factors. In the Macmillan Committee (1931), the late Lord Keynes put forward the opinion that protection and not free trade was needed to restore the much-needed economic stability for an economy which is out of gear.

### Arguments Against Protection

Let us now look at the other side of the shield and see if there are any drawbacks in the policy of protection. The usual arguments are:—

(i) Vested interests are created. Once certain industries are given protection, they claim it as a matter of right. It then becomes very difficult to take away protection. The 'infants' begin kicking if you touch them in any manner. Such infants refuse to admit that they have grown into adults.

(ii) Protection produces lethargy and acts like an opiate. When foreign competition has been removed, it sends the home manufacturers to sleep, as it were. They do not try to make any improvement, and technical progress comes to a standstill.

(iii) Then there is the danger of corruption. The industrialists bribe legislators so that protection is not taken away. This evil was rampant in the U.S.A. at one time.

(iv) Protection creates monopolies. Tariff is said to be the mother of trusts. When foreign competition has been removed, the home manufacturers are tempted to combine to reap monopoly profits. That explains, for instance, the birth of the Indian Sugar Syndicate.

(v) Consumers and unprotected industries suffer. This is so because imposition of import duties invariably leads to the rising of prices.

(vi) The distribution of wealth becomes more unequal. Protection favours the rich capitalists who grow still richer. The gulf between the 'haves' and 'have-nots' is thus widened still further.

(vii) Protection leads to conflict, friction and retaliation in international dealings. It thus breeds the germs of future wars.

(viii) The most important argument against protection on economic grounds is that it militates against optimum utilisation of resources. It hampers international division of labour so that labour, capital and other factors of production do not find their most remunerative employment. Their distribution is not governed by natural economic forces but they are artificially forced into certain channels. The result is that they do not make their maximum possible contribution in the production of commodities. The world output is lower than it could be, so that the standard of living is necessarily lowered. A natural movement towards world prosperity is hindered.

To this argument it may be replied that so long as world citizenship does not come into existence, the economically backward countries must safeguard their interests against cut-throat competition from the economically powerful countries.

### Conclusion

On the whole, therefore, we come to the conclusion that in theory free trade may be the best, but in practice protection is, in some cases, essential, especially in the case of economically underdeveloped countries like India.

### ROLE OF PROTECTION IN UNDER-DEVELOPED COUNTRIES

There is no doubt that historically speaking protection was an instrument used by industrially backward countries to catch up with the advanced countries. The U.S.A. as well as the countries of the European continent adopted the policy of protection against the United Kingdom which was industrially ahead of them. Their industries could not face the British competition since they had entered the race of industrialisation later. The force of 'infant-industry argument' was admitted even by the eminent English economists like Alfred Marshall, although the English economists have, as a rule, favoured free trade as against protection.

Now protection is being given extended application in developing economies. They are not backward merely in industrial development but they are backward generally in economic development. Protection may be needed even by farm products. The developing economies are desirous of registering economic advance in all sectors of the economy, of course, in accordance with a scheme of priorities.



Fresh economic development cannot obviously last if exposed to the withering competition from abroad. There is a period during which newly gained economic gains must be protected and consolidated: 'Nurse the baby, protect the child and free the adult' is a maxim which still holds good.

In all plans of economic development, protection occupies an important place. What is generally done is that when a certain industrial project is taken up as a part of the economic development plan, the imports of competing manufactured goods are substantially curtailed or totally banned for some years so that the field is left free for domestic manufactures. The home market is thus preserved by protection for the home manufactures. If this is not done, all investment in the new lines of manufacture may go to waste, because foreign competition will not allow the home manufacturers to acquire a foothold in the home market. Unless there is prospect of protection for the new products, no investor will come forward and make investment in that particular field. As a consequence, the development plans will fall through.

Protection is known to be of two varieties: the safeguarding variety and the developmental variety. In India, we first introduced what came to be known as discriminating protection. This was more or less protection of the safeguarding variety. In spite of its being in operation for more than a quarter of a century, the goal of industrial development remained as far as ever. After the country became independent, a new look had to be given to the fiscal policy and a Fiscal Commission was appointed in 1950. It recommended a new fiscal policy which may be described as 'developmental'. It fitted in with the requirements of a developing economy.

Fiscal policy is now being used as an instrument of planning. It plays a vital role in economic development. It must be such as to encourage saving and investment in the country. Fiscal policy can be used as a device to bring about greater investment and increase in income and employment in the country. It can also be used for reducing inequalities of income and wealth in the country which is a desirable objective of economic development.

A developing country has very carefully to work out import policy to be pursued from year to year. Imports are strictly controlled and quotas fixed. While fixing quotas, the main consideration is the availability of foreign exchange. As a rule, where the country has the capacity to meet entire domestic demand, tariffs are increased even up to 100 per cent. When the home industry can meet home demand partially, the imports are regulated by quotas. As for exports, export promotion drive is launched. Export incentives are provided by removal or reduction of export duties and by giving several concessions to exporters.

Thus, protection is of special value, say an urgent necessity, for the under-developed and developing countries. We indicate below in a summary way why so:—

(i) The 'infant industry argument' specially indicates the need for protection for the developing countries. But it should be selective or of a discriminating type.

(ii) As Pigou observes, "The case for protection with a view to building up productive power is strong in any agricultural country which seems to possess natural advantages for manufactures". It is especially the case for under-developed, predominantly agricultural countries like India.

(iii) Protection preserves the available foreign exchange for the import of capital equipment, essential raw materials and the technical know-how so urgently needed to give a push to the development process.

(iv) Protection strengthens the economy of under-developed countries and increases the GNP and eventually results in the expansion of international trade.

(v) Protection will strengthen defence and promote self-sufficiency and full employment in such countries. This is all the more necessary in a world of political uncertainty.

(vi) Protection is an essential ingredient of planned economic development for which control and regulation of all economic activity are so very necessary.

Thus, protection has come to play a vital role in developing economies to bring about rapid economic development.

## BARRIERS TO FOREIGN TRADE

In view of the protectionist sentiment prevailing in economically backward countries, obstacles have been raised in the way of free foreign trade. Obstructions to foreign trade may take various forms. Among these are: (1) Prohibition of imports or exports, (2) exchange control, (3) customs duties, (4) preferential treatment, (5) quotas, (6) import licences, and (7) import monopolies. A few words may be said about each of these.

**Import Prohibition.** Sometimes import of certain commodities is prohibited by law or allowed only under defined conditions. For instance there are "sanitary regulations". The United States once excluded beef from a certain region in Argentina where foot and mouth disease had attacked cattle. Later, the embargo was extended to the whole of Argentina. Sometimes countries indirectly curtail imports by refusing to export certain materials until they have been processed at home. "Rumania did not let her oils out except on the condition that it be



first refined at home, while Hungary will not admit Rumanian oil except on the condition that it be refined after it is received.”<sup>5</sup>

**Exchange Control.** Exchange control implies government interference with the buying and selling of foreign exchange. In this way, foreign trade is curtailed and driven into fixed channels. Government may “allot” exchange or ration it out so that importers can buy only a limited amount of goods in foreign countries. Or they may “block” exchange. For instance, an American exporting goods to Germany may be required to use the marks exchange thus obtained in purchasing goods in Germany. Another way is known as exchange “clearing.” Thus, a German buying goods worth \$1,000 from America may be required to deposit this amount in a German bank, while a German selling goods worth \$1,000 to an American may draw on the bank for payment. In this way, an attempt is made to carry on foreign trade without the use of foreign exchange.

**Customs Duties.** This is an old method and consists in imposing import or export duties on goods coming into or going out of the country, respectively. Import duties are more common than export duties. A duty is said to be *specific* when it is imposed according to a standard of weight or measurement, e.g., 6 Paisa per yard of cloth or two rupees per 40 kg. of wheat, etc. The duty is called *ad valorem* when it is imposed according to value, e.g., 10 per cent on motor cars or radio sets.

Customs duties or tariffs may have either revenue or protection as their aim. To protect cotton industry, an export duty on raw cotton may be imposed to cheapen it for the home manufacturer or an import duty on cotton manufactures may be levied. The latter is the usual method. The revenue duty is for revenue primarily and is levied for the financial year. It may be revised or discontinued in the next budget. The protective duty has greater continuity. Since the intention is to attract labour and capital to a particular industry, it must be levied for a number of years.

**Preferential Treatment.** Sometimes discrimination is made in the rate of duties with regard to different countries. For instance, India gave preferential treatment to certain British goods under the Ottawa Agreement of 1932. India also received preferential treatment in the British markets against non-Empire goods. This is known as **Imperial Preference**. Such arrangements curtail international trade and lead to the development of trade blocs. Moreover, countries whose goods pay higher duties may retaliate and impose high duties on the discriminating country in return.

**Quota Restrictions.** There are two kinds of quotas: “Customs quotas” and “import quotas”. The first type allows a certain amount of a commodity at a favourable duty; beyond this the normal duty is charged. The limits are settled by agreements, e.g., the U.S.A. does this with the Canadian cream and some other commodities coming under the reciprocal trade agreements. The “import quota” has more serious effect on trade. Here an arbitrary limit is set beyond which imports during a given period are not allowed.

**Quota System vs. Import Duties.** The import duties bring revenue to the State Treasury but under the quota system the difference between the foreign price and the home price, which arises on account of the restricted supply, is pocketed by the importer. The government is, on the other hand, saddled with expenditure incurred in the administration of the quotas. The difference may even go to the foreign exporters, if they hold exporting licences and are strongly organised, whereas there may be a scramble for these goods among the importers.

**Advantages of Quota System.** The quotas are more flexible, as they are subject to administrative manipulation and are not a matter of legislation.

There is another advantage, viz., that under the quota system the quantities to be imported are definitely known and the home manufacturers can regulate their output accordingly. The quotas are not so much resented as the import duties are. The quotas are useful as bargaining counters in trade negotiations with other countries. The quotas can be reduced to grant further protection when a trade agreement may preclude the raising of import duties. Further, under the quota system the ‘Most-Favoured Nation’ clause can be evaded.

**Disadvantages.** The quota system has also several disadvantages: The home market is altogether isolated from the world market. Prices may be falling outside, but they will have no effect on the home market, because the quota is fixed and no goods can be imported beyond the quota. In the case of import duties, changes in the world prices bring about corresponding changes in the home prices. Similarly, if the foreign exporters are able to reduce costs, the home consumer cannot benefit under the quota system, as he would have benefited under a stable import duty. Under the quota system, government suffers a loss of revenue which it could get if it had imposed import duties. Finally, the quota system puts too much power in the hands of administrative officials as against the legislators.

**Import Licences.** Under this system, the government does not allow import of certain goods without a licence being obtained by the importer. In this way, imports can be cut down and certain goods discriminated against.

**Import Monopolies.** The Government may make

5. B.W., Knight—*Economic Principles in Practice*, p. 344.

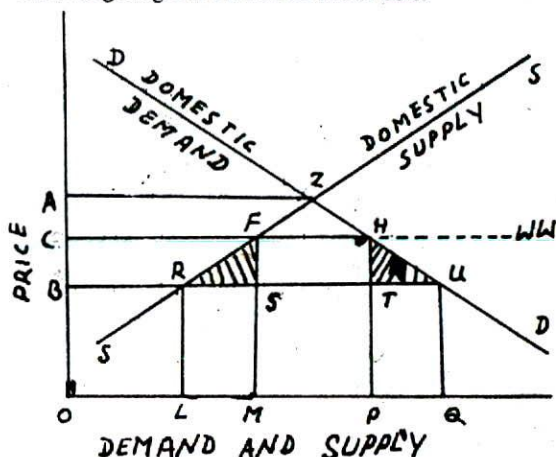


the import of goods a State monopoly, as Russia does, and thus reduce imports or discriminate against certain countries.

**Conclusion.** We may conclude in Samuelson's words, "A system of prohibitive tariffs puts a society inefficiently inside the consumption-possibility frontier that would be available if the efficiencies of international exchange and division of labour were utilised. This is absolutely true of the world as a whole, and particularly true for a country that cuts off all imports and becomes self-sufficient."<sup>6</sup> The citizens are forced to curb their consumption of goods they desire the most and to channel their resources from uses of true comparative advantage to economically inefficient uses.

### A Note on The Theory of Tariffs

Tariff is an important tool of commercial policy. Although it is primarily a protectionist device yet it proves to be a double-edged weapon. On the one hand, it limits consumer's choice by forcing him to cut consumption of the goods he likes and, on the other, it shifts the use of resources from one use to another. The effect of tariffs is to change relative prices of goods and services and to change the relative prices of the factors of production. The following diagram illustrates the effects.



In this diagram, demand and supply are represented along the X-axis and price along the Y-axis, DD and SS respectively are demand and supply curves. Before the imposition of the tariff, domestic supply is OL and domestic demand is OQ. OB is the price. At this price, demand exceeds the supply and the excess is met by imports equal to LQ. Now suppose tariff equal to BC is imposed. Since at OB price the imports have infinite elasticity, they will not be affected by the tariff. But it will raise the price in the domestic market from OB to OC. At OC

price, foreign supply line shifts to CWW and imports are cut down from LQ to MP (= FH). As a result, the domestic production increases from OL to OM (i.e. by LM).

**Protective Effect.** Tariff reduces the imports of competing goods thus affording protection to the domestic producer. Domestic production is increased as shown above as a result of the imposition of tariff. This is known as **Protective effect**.

**Consumption Effect.** When tariff is imposed, price of the commodity rises and domestic consumption is reduced from OQ to OP. This is called the **Consumption effect**.

**Revenue Effect.** The government derives revenue from the tariff which is measured by the quantity of the imports multiplied by the rate of the tariff. This is represented by the area FSTH. This is the **Revenue effect**.

**Redistribution Effect.** The imposition of the tariff increases the price of the commodity and thus reduces the consumers' surplus. In this way, some income is transferred from the consumers to the producers. This affects distribution of income. It is called the **Redistributive effect**. In the diagram it is represented by the quadrilateral BRFC.

**Stolper-Samuelson Theorem.** The redistributive effect can be studied with the help of the Stolper-Samuelson theorem. Two factors labour and capital are taken into consideration. When tariff is imposed, the prices of imports increase. This will lead the domestic producers to change their production pattern. Naturally they will increase the production of import goods and decrease that of export goods. This change in the production pattern will affect the relative prices of the factors of production.

**The Terms of Trade Effect.** Take the case of two countries A and B with different factor endowments giving comparative advantage to each in the production of a certain commodity. Tariff will reduce the volume of trade and the terms of trade will improve for the country imposing the tariff.

**Effect on National Income.** If a country is facing unemployment problem, imposition of tariff will increase employment and thus increase national income. This happens because with the imposition of tariff consumers' demands are diverted to the domestically produced goods. To meet this increased demand new production units will be set up. As a result lot of employment will be created and national income increased.

**Optimum Tariff.** A tariff is said to be optimum when its rate maximises the welfare of the country i.e. when the rate is considered best from all points of view, it is neither high nor low. It is the ideal rate.

6. Samuelson, P.A.—*Economics*, 9th Edition, p. 678.



# Part II

## Balance of Payments and International Monetary System

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### BALANCE OF PAYMENTS

#### Definition of Balance of Payments

In the modern world, there is hardly any country which is self-sufficient in the sense that it produces all the goods and services that it needs. Every country imports from other countries the goods that cannot be produced at all in the country or can be produced only at higher cost than foreign supplies. Similarly, a country exports to other countries the commodities which those countries prefer to buy from abroad rather than produce at home.

**The balance of payments is a comprehensive record of economic transactions of the residents of a country with the rest of the world during a given period of time.** The record is so prepared as to provide meaning and measure to the various components of a country's external economic transactions. Thus, the aim is to present an account of all receipts and payments on account of goods exported, services rendered and capital received by residents of a country, and goods imported, services received and capital transferred by residents of the country. The main purpose of keeping these records is to inform government of the international economic position of the country and to help it in reaching decisions on monetary and fiscal policy on the one hand, and trade and payments questions on the other.

#### Balance of Payments: Current and Capital Accounts

The balance of payments on current account includes items like imports and exports, expenses on travel, transportation, insurance, investment income, etc. These relate to current transactions.

The Capital Account, on the other hand, is made up of capital transactions, e.g., borrowing and lending of capital, repayment of capital, sale and purchase of securities and other assets to and from foreigners—individuals and governments. When both current and capital accounts are taken, it is

called over-all balance of payments. It is the over-all balance of payments which must balance.

By way of illustration, we give on the next page India's Balance of payments on Current Account and on Capital Account for the year 1979-80

#### Items Included in the Balance of Payments

The various items in the balance of payments (current account) are given below:

(i) The chief item is the international trade in commodities. Export of commodities to foreign countries adds to our foreign receipts, while imports add to the payments that we have to make to the foreigners. **The difference between the value of commodity exports and imports is known as the Balance of Trade.** If exports exceed imports, the balance of trade is said to be favourable, and if imports exceed exports the balance of trade will be unfavourable. As we see from the following table, in 1979-80, India had an unfavourable balance of trade because our imports exceeded exports. The commodity exports and imports entering the balance of trade are also called **visible** items because they are recorded at the customs barriers of the country.

(ii) In addition to the import and export of goods, we also import and export certain services. Such services may be of various kinds for which payments have to be made or received, e.g., transport charges, shipping freight, passenger fares, harbour and canal dues, commercial services (fees and commissions), financial services (brokers' fees, etc.) and services connected with the tourist traffic and payment of interest on external debt. As against commodity or merchandise transactions, which are **visible**, these services are called **invisible** items of the balance of payments as they are not recorded at the customs barriers. If we render more invisible services to the foreigners than they render to us, we shall have a surplus on invisible account.

Previously, India used to have a deficit on invis-



## India's Overall Balance of Payments-Current Account, 1979-80

|     | Items                              | Credits<br>(in crores) | Debits<br>(in crores) | Net<br>(in crores) |
|-----|------------------------------------|------------------------|-----------------------|--------------------|
| 1.  | Merchandise                        |                        |                       |                    |
|     | (i) Private                        | 6181.0                 | 4837.6                | + 1343.4           |
|     | (ii) Government                    | 20.4                   | 4738.1                | - 4717.7           |
| 2.  | Non-monetary gold movement         | 5.2                    | —                     | + 5.2              |
| 3.  | Travel                             | 920.0                  | 88.2                  | + 831.8            |
| 4.  | Transportation                     | 318.5                  | 252.7                 | + 65.8             |
| 5.  | Insurance                          | 42.8                   | 28.1                  | + 14.7             |
| 6.  | Investment income                  | 643.0                  | 378.8                 | + 264.2            |
| 7.  | Government, not included elsewhere | 86.4                   | 87.8                  | - 1.4              |
| 8.  | Miscellaneous                      | 558.6                  | 562.1                 | - 3.5              |
| 9.  | Transfer payments                  |                        |                       | 1624.2             |
|     | (i) Official                       | 347.5                  | 8.7                   | + 338.8            |
|     | (ii) Private                       | 1631.9                 | 7.7                   |                    |
| 10. | <b>Total Current Transactions</b>  | <b>10,755.3</b>        | <b>10989.8</b>        | <b>+ 1,734.7</b>   |
| 11. | <i>Errors and omissions</i>        |                        |                       | - 234.5            |
|     |                                    |                        |                       | + 10.6             |

## India's Overall Balance of Payments-Capital Account, 1979-80

|    | Items                                  | Credits<br>(in crores) | Debits<br>(in crores) | Net<br>(in crores) |
|----|--|------------------------|-----------------------|--------------------|
| 1. | Private                                |                        |                       |                    |
|    | (i) Long-term                          | 93.9                   | 133.9                 | - 40.0             |
|    | (ii) Short-term                        | —                      | 0.3                   | - 0.3              |
| 2. | Banking                                | 205.7                  | 287.4                 | - 81.7             |
| 3. | Official                               |                        |                       |                    |
|    | (i) Loans                              | 982.3                  | 87.0                  | + 895.3            |
|    | (ii) Amortisation                      | 3.4                    | 479.4                 | - 476.0            |
|    | (iii) Miscellaneous                    | 632.4                  | 336.5                 | + 295.9            |
|    | (iv) Reserves                          | 863.2                  | 1,232.5               | - 369.3            |
|    | <b>Total Capital and Monetary Gold</b> | <b>2,780.9</b>         | <b>2,557.0</b>        | <b>+ 223.9</b>     |

SOURCE: Reserve Bank Bulletin, April 1982, 5212.

ble account as our payment on this account exceeded our receipts. India had to pay for the services of British officers working in India, their salaries, pensions and gratuities, shipping charges for use of foreign ships, bank charges for use of the foreign banking services, etc. However, in recent years, India is having a surplus on invisible account as the above table shows. This is because now she renders more services to the foreigners than they render to her and also because of official donations and private remittances from the foreign countries sent to India.

(iii) If we group together both the visible and invisible transactions, we get balance of payment on current account. If the value of our visible and invisible receipts is greater than the value of visible and invisible payments by us, then we shall have a favourable balance or a surplus balance of payments on current account, and *vice versa*. In recent years, India has been suffering from huge deficits in our

balance of payments on current account despite sizeable remittances from abroad by Indians residing there.

(iv) In addition to current transactions, there are also capital movements between the countries. For example, capital may move from one country to another. The country which receives capital will add to its foreign receipts at the time when such capital is received, but at the time of repayment of debt it will increase our payments to the foreigners. Capital between the two countries may move at the inter-governmental plane—*i.e.*, loan from one government to another. It may also move on private account—when, for example, American investors invest their capital in Indian industry. Capital movements may be short-term or long-term. Short-term capital inflow carries with it the risk of early outflow and is liable to add an element of uncertainty to the country's international transactions.

In recent years, to finance a heavy deficit on



current account, India has been getting lot of foreign loans both from the friendly foreign governments as well as from private investors.

(v) By summing up the balance on the current account and the balance of capital account, we get a country's overall balance of payments. If there is a deficit on overall account, and a country is not able to find sufficient capital inflow to neutralise the effect of a deficit on the current account, it will have to draw upon its reserves of foreign exchange. If on the other hand, the current account surplus is greater than the capital outflow from a country, its foreign exchange reserves will increase. In recent years, the inflow of foreign capital—official as well as private—being insufficient to finance fully India's deficit on current account, she was forced to draw down her foreign exchange reserves which have been drastically cut down.

#### Balance of Payments and Balance of Trade

As we have already said, balance of trade refers only to the merchandise balance or balance on visible transactions alone. On the other hand, the balance of payments refers to the sum of both the balance on visible as well as invisible items. It also includes capital and financial accounts. We have already explained the meaning of the terms visible and invisible. To repeat, visible items are those which are duly recorded at the customs barriers, while invisible transactions are incapable of being so recorded.

For the country's overall international economic position, what really matters is its balance of payments and not the balance of trade alone. A country may have a deficit on trade balance, while it may have a surplus in balance of payments on current account. England for a long time used to have a deficit on trade account and this deficit was more than made up by her surplus on invisible account so that her balance of payments position remained favourable. As against this, India under the British rule used to have a favourable trade balance, but her surplus on balance of payments was considerably reduced because of a host of invisible payments like the 'home charges' that she had to make to England.

#### How Does the Balance of Payments Balance?

The balance of payments (on current account) is said to balance when the total of the credit items is exactly equal to the total of the debit items. But, it is seldom so. Hence, there is either a deficit or a surplus in the current account of the balance of payments. This deficit or surplus is met by transfers in the capital account. In other words, the balance of payments is made to balance through the capital account.

Suppose there is a deficit in the current account of the balance of payments. This deficit will be covered

by (a) drawing upon the country's foreign exchange reserve, (b) by borrowing from abroad, and (c) by exporting gold. Now the I.M.F. grants temporary accommodation to bridge the gap.

### EQUILIBRIUM, DISEQUILIBRIUM AND ADJUSTMENT

#### Balance of Payments Equilibrium

Before we analyse the conditions of disequilibrium, we would like to explain what is meant by equilibrium balance of payments. "Equilibrium is that state of the balance of payments over the relevant time period which makes it possible to sustain an open economy without severe unemployment on a continuing basis."<sup>1</sup> The essentials in this definition are: (a) relevant time period, (b) openness of economy (*i.e.*, no undue restrictions on imports), (c) absence of unemployment, and (d) continuing basis of the equilibrium (*i.e.*, it is capable of being sustained). The period is generally one year. Thus, seasonal inequality between exports and imports is not a sign of disequilibrium.

**Static Equilibrium.** A distinction is also made between static equilibrium and dynamic equilibrium. The distinction between static and dynamic equilibrium depends upon the time period. In static equilibrium, exports equal imports including exports and imports of services as well as goods and the other items on the balance of payments—short-term capital, long-term capital and monetary gold, are on balance, zero. Not only should the balance of payments be in equilibrium, but also national money incomes should be in a equilibrium vis-a-vis money incomes abroad. The foreign exchange rate must also be in equilibrium.

**Dynamic Equilibrium.** The condition of dynamic equilibrium for short periods of time is that exports and imports differ by the amount of short-term capital movements and gold (net) and there are no large de-stabilising short-term capital movements.

The condition for dynamic equilibrium in the long run is that exports and imports differ by the amount of long-term autonomous capital movements made in a normal direction, *i.e.*, "from the low-interest-rate country to those with high rates."<sup>2</sup>

When the balance of payments of a country is in equilibrium, the demand for domestic currency is equal to its supply. The demand and supply situation is thus neither favourable nor unfavourable. If the balance of payments moves against a country, adjustments must be made by encouraging exports of goods, services or other forms of exports, or by discouraging imports of all kinds. No country can have a permanently unfavourable balance of pay-

1. Kindleberger, C.P.—*International Economics*, 1963, p. 501.

2. *Ibid.*, p. 506.



ments, though it is possible—and is quite common for some countries—to have a permanently unfavourable balance of trade. Total liabilities and total assets of nations, as of individuals, must balance in the long run.

This does not mean that the balance of payment of a country should be in equilibrium individually with every other country with which she has trade relations. This is not necessary nor is it the case in the real world. Trade relations are multilateral. India, for instance, may have an active balance of payments with the United States and passive balance with the United Kingdom and/or other countries. But each country, in the long run, cannot receive more value than she has exported to other countries taken together.

Equilibrium in the balance of payments, therefore, is a sign of the soundness of a country's economy. But disequilibrium may arise either for short or long periods. A continued disequilibrium indicates that the country is heading towards economic and financial bankruptcy. Every country, therefore, must try to maintain balance of payments in equilibrium. To know how this can be done involves the study of the theories and causes of disequilibrium in the balance of payments of a country.

### Types and Causes of Disequilibrium

There are several variables which join together to constitute equilibrium in the international economic position of a country, *viz.*, national incomes at home and abroad, the prices of goods and factors, the supply of money, the rate of interest, *etc.* At the back of these variables lie the supply of factors, production functions, the state of technology, tastes, the distribution of income, the state of anticipations, *etc.* If there is a change in any of these variables and there are no appropriate changes in other variables, disequilibrium will be the result.

The bulk of balance-of-payments difficulties is the result of **domestic inflation**; and disinflation is the obvious remedy. The decline in income will reduce domestic demand for goods and release them for sale abroad. The reduction in prices will make the country a better country to buy from than to sell to thus increasing exports and reducing imports. Halting of inflation and correction of exchange rate tend to reverse speculation which had depleted foreign exchange reserves and will lead to a return flow of domestic capital and build up again foreign working balances.

There are three main types of disequilibria: (a) Cyclical Disequilibrium, (b) Secular Disequilibrium, and (c) Structural Disequilibrium.

**Cyclical Disequilibrium.** Cyclical disequilibrium is caused by countries having different cyclical patterns of income, or the same income pattern with different income elasticities, or identical income

patterns and income elasticities by different price elasticities. "If prices rise in prosperity and decline in depression, a country with a price elasticity for imports greater than unity will experience a tendency for a decline in the value of imports in prosperity, while those for which import price elasticity is less than one will experience a tendency for increase. These tendencies may be overshadowed by the effects of income changes, of course. Conversely, as prices decline in depression, the elastic demand will bring about an increase in imports, the inelastic demand a decrease."<sup>3</sup>

It is said that the under-developed countries suffer in terms of the balance of payments both from low prices in depression which hurt exports and from high incomes in prosperity which give rise to heavy imports. The developed countries are hurt consistently by high import prices during periods of world prosperity, and by low incomes abroad during periods of depression.

But these are too sweeping statements and are also contradictory. There is no doubt that the balance of payments of under-developed countries is adversely affected by the income effect in prosperity and the terms-of-trade (price) effect in depression. But before any conclusion can be drawn about the net impact on such countries of trade cycles, one must study the income effect in depression and the terms-of-trade (price) effect in prosperity; and the converse for developed countries.

**Secular Disequilibrium.** As for secular (long run) disequilibrium in balance of payments, they occur because of long-run and deep-seated changes in an economy as it advances from one stage of growth to another. The current account follows a varying pattern from one state to another. In the initial stages of development, domestic investment exceeds domestic savings and imports exceed exports. Disequilibrium arises owing to lack of sufficient funds available to finance the import surplus, or the import surplus is not covered by available capital from abroad. Then comes a stage when domestic savings tend to exceed domestic investment and exports outrun imports. Disequilibrium may result, because the long-term capital outflow falls short of the surplus savings or because surplus savings exceed the amount of investment opportunities abroad. At a still later stage, domestic savings tend to equal domestic investment and long-term capital movements are, on balance, zero.

Now if there is any change, it will cause a disequilibrium. This is a balanced stage and a secular disequilibrium will occur when either the long-term capital movement gets out of adjustment with deep-seated factors affecting savings and investment, or scheduled savings and investment

3. Kindleberger, C.P.—*International Economics*, 1963, p. 525.



change without an offsetting change in the movement of long-term capital. If investment adjusted itself readily to the amount of domestic savings plus foreign capital, there could be no tendency for secular disequilibrium.

The balance-of-payments position will also be in order, if the international capital flow fell into line with the requirements of domestic investment minus domestic savings. There is a tendency to secular disequilibrium, because domestic savings and domestic investment are independent of the foreign capital flow and are of different magnitudes. There is a strong tendency for under-developed countries to over-invest and/or undersave. These countries are anxious to narrow the gap between their economic level and that of the advanced countries. The tendency to overspend follows fairly automatically from the character of the economic effort. This must cause a disequilibrium in balance of payments.

**Technological changes are another major cause of disequilibrium** in the balance of payments. Each technological change implies a new comparative advantage, which the other country adjusts to, but the adjustment process itself produces a balance of payments deficit. The innovation leads to increased exports if it is a new good or an export biased innovation; or it may lead to a decline in imports if the innovation is import-biased. This will create a disequilibrium. A new equilibrium will require either increased imports or reduced exports.

To the extent, the secular disequilibrium is due to the incongruence of foreign lending or borrowing, with excess domestic savings over investment or of investment over savings, the obvious remedy lies in changing foreign lending or borrowing, on the one hand, or domestic savings and investment, on the other, or both.

**Structural Disequilibrium.** There is another type of disequilibrium, *viz.*, structural disequilibrium. Let us see how this type of disequilibrium is caused. "Structural disequilibrium at the goods level occurs, when a change in demand or supply of exports or imports alters a previously existing equilibrium, or when a change occurs in the basic circumstances under which income is earned or spent abroad, in both cases without the requisite parallel changes elsewhere in the economy."

Suppose demand for Indian handicrafts falls off. The resources engaged in the production of these handicrafts must shift to some other line or the country must restrict imports, otherwise the country will experience a structural disequilibrium. Suppose Indian jute crop fails, export will fall and disequilibrium will be created. Apart from goods, a loss of service income may also upset the balance-of-payments position on current account. The loss of income may arise, because foreign investment has proved a failure or it has been confiscated or

nationalised, *e.g.*, nationalisation of Anglo-Iranian Company in Iran. A war also produces structural changes which may affect not only goods but also factors of production.

A deficit arising from a structural change can be filled by increased production or decreased expenditure, which in turn affect international transactions in increased exports or decreased imports. Actually, it is not so easy, because the resources are relatively immobile and expenditure not readily compressible. Disinflation or depreciation may be called for to correct a serious disequilibrium.

"Structural disequilibrium at the factor level results from factor prices which fail to reflect accurately factor endowments, *i.e.*, when factor prices, out of line with factor endowments, distort the structure of production from the allocation of resources which appropriate factor prices would have indicated". If, for instance, the price of labour is too high, it will be used more sparingly and the country will import goods with a higher labour content. This will lead to unemployment, upsetting the balance in the economy.

We have explained above four types of disequilibria—cyclical, secular and two kinds of structural disequilibria and how they are caused. In each case, the causes manifest themselves through changes in export and import of goods and services making one exceed the other.

We have already detailed the various items that enter into the balance of payments. Any cause that leads to a persistently one-sided movement in those items may cause a disequilibrium. For instance, certain causes may lead to a falling off in the export of merchandise, imports remaining unaffected or moving in the opposite direction. Falling off in exports may be due to all sorts of causes.

Take the case of merchandise for illustration. Our exports may fall because of decreased production due to seasonal factors or other causes. The demand for our goods in the international market may fall off because of a fall in the purchasing power of the consumers of such goods or because of a comparatively high cost of production in India which reduces our competitive strength in the international market. Our exports may become dear to foreigners because of an appreciation of our exchange, a rise in the value of the rupee, say from 1s. 6d. to 1s. 8d. If we persist in artificially keeping the value of the rupee at a higher level than justified by economic forces (which we shall study in the next chapter), unfavourable balance of trade and of payments will tend to persist.

In the same way, disequilibrium may arise due to excessive imports or services neither balanced by exports nor by import of capital, *etc.* Compulsory exports in the form of reparations or indemnities also cause international disequilibrium and obstruct



the harmonious trade relations between the countries concerned.

### Theories Concerning Disequilibrium in Balance of Payments

There are broadly the following three main theories which explain how a disequilibrium in balance of payments is caused:

- (i) Classical Theory or Price Theory.
- (ii) Keynesian Theory or Income Theory.
- (iii) Demonstration Effect Theory.

Now a word about each of these.

**Classical Theory.** This theory explains disequilibrium in the balance of payments of a country in terms of relative costs and price structures. A country is likely to have an adverse balance of payments if her cost and price structure is relatively higher as compared with that of her trading partners. This theory assumes that there exists a significant element of substitutability between the home-made goods and foreign goods. If this is so, then the consumers in the country whose cost and price structure is relatively higher will substitute home-made goods by foreign goods. This will increase the imports of the country significantly and thus create balance of payments problem for the country.

**Income Theory.** Joan Robinson, Harrod and Haberler were mainly responsible for developing this theory. By using Keynesian tools, these economists came to the conclusion that the disequilibrium in the balance of payments of a country can be explained in terms of relative incomes. According to this theory, a country would face a disequilibrium in the balance of payments if her income is rising faster than that of her trading partners. This theory assumes that imports are a function of income, *i.e.*, with an increase in income, imports of a country would rise. Therefore, if the income of a country is rising faster than that of her trading partner countries, her imports are bound to increase faster, which in turn will give rise to a disequilibrium in her balance of payments.

**Demonstration Effect Theory.** This theory was propounded, chiefly by Ragner Nurkse. It was suggested by Nurkse and also by MacDougall, that the high standards of living of the advanced countries had the effect of inducing the developing countries also to raise theirs. The aspirations of these countries to imitate the living standards of the advanced countries, resulted in their undertaking heavy investment programmes and in huge imports of luxury items. In other words, the standards of living of advanced countries serve as a 'demonstration model' for the less developed countries. The result of this is a fantastic increase in their imports, which in turn creates balance of payments problems for them.

**Conclusion.** No single theory can explain the disequilibrium in the balance of payments of a developing economy. There are a number of factors operating simultaneously which cause this disequilibrium. The main causes are:

- (i) Ambitious development programme necessitating large-scale imports of machinery, plant and equipment, raw materials and technical know-how;
- (ii) Exports lagging behind owing to low level of productivity in agro-based industries and competition and stagnant or declining demand for traditional exports, and increased domestic consumption;
- (iii) Food imports owing to high elasticity of demand for food and increase in population.

### Methods of Correcting Disequilibrium in Balance of Payments

When serious disequilibrium arises in a country's balance of payments, steps must be taken to correct it, if the country's economy is to be kept in a sound condition. Obviously, the causes which are responsible for such a state of affairs must be removed. The 'classical' view of the adjustment mechanism is: "An active or passive balance, accompanied by an inflow or outflow of gold, was normally supposed to result in an expansion or contraction of the domestic money supply; and this expansion or contraction was expected to bring about a rise or fall in the level of domestic costs and prices tending, in the former case, to stimulate imports and discourage exports or, in the latter, to discourage imports and stimulate exports. Gold flows, changes in the quantity of money and changes in relative price levels thus appeared as the principal factors in the mechanism of adjustments."<sup>4</sup>

Recent currency experience has, however, led to certain modifications in the classical theory. It is now thought that changes in the flow of income induced by balance of payments serve as an equilibrating factor. "The main point is that any active or passive balance of current transactions . . . tends directly to expand or contract the total flow of money income within a given country . . . The change induced by the balance of payments in the flow of income and outlay affect, in turn, the demand for imported as well as home-produced goods and so react on the balance in an equilibrium manner".<sup>5</sup>

There are five well-known methods of correcting an adverse balance of payments:

- (i) **Stimulating exports and/or checking imports.** If the exports have fallen off, steps should be taken to encourage them. To encourage exports the level of costs in the country may have to be brought down. This may involve cutting down of wages and

4. League of Nations—*International Currency Experience*, 1944, p. 9.

5. *Ibid.*, p. 600.



interest rates and other incomes and also contraction of currency to bring the prices down.

Exports are also encouraged by granting bounties to manufacturers and exporters. Imports may be discouraged either by total prohibition or by imposition of import duties or by adopting the quota system.

(ii) Another method is to **depreciate the external (exchange) value** of the home currency, thus cheapening domestic goods for the foreigner. This latter course, however, has serious limitations, because other countries may start doing likewise and 'competitive' depreciation of exchange rates may start, as it happened during the depression years in the 'thirties.

It may be noted that the rate of exchange serves as an equilibrating factor between the balance of payments. If, for instance, the demand for American goods increases, the demand for the dollars will increase, and, in the absence of exchange control the price of dollar in terms of foreign currencies will go up. This by itself will discourage the foreign buyers from buying in America and encourage Americans to buy from abroad. In this way the balance may be restored. Normally, it will be so. But if a further rise in the price of the dollar is feared, the foreigners will increase their purchases of American goods now lest they should become dearer still; it will also hold back the Americans from buying more from abroad. In this way, the disequilibrium may be accentuated, instead of being cured.

(iii) The third method is to **deflate the currency**. As currency contracts, prices will fall, which will stimulate exports and check imports. But the method of deflation is also full of dangers. If prices are forced down while costs, which are proverbially rigid (especially as regards wages in countries where trade unions are well organised), do not follow suit, the country may face a serious depression and unemployment. Correcting the balance of payments, therefore, once a disequilibrium has arisen is not an easy matter.

(iv) The fourth method is **devaluation**. Its effect is the same as that of depreciation. When a currency is devalued (i.e., its metallic content is reduced), its value in terms of foreign currency decreases. The result is that foreigners are able to buy in our country more goods than before with the same amount of their currency. This would stimulate exports. But when we want to buy foreign goods, our currency, having become cheaper, we have to pay more for them. Imports are thus discouraged, and, in course of time, the balance of trade turns in our favour and corrects the balance of payments.

The success of devaluation in improving the balance of trade, and through it the balance of payments, depends upon the demand elasticities of imports and exports of the devaluing country. In

other words, an improvement in the balance of trade will depend upon whether the demand for imports and exports is elastic or inelastic. Devaluation makes the imports of the devaluing country costlier than before and in case her demand for imports is inelastic, a higher amount will be spent for the same imports, thereby worsening her balance of trade. Similarly, if her export demand is inelastic, then, after devaluation, lesser amount will be spent by the foreigners thereby affecting adversely the balance of payments of the devaluing country. However, if her demand for exports is elastic then with a fall in the prices of the exports as a result of devaluation, more will be purchased by the foreigners, which, in turn, will help in restoring the equilibrium in her balance of payments. Likewise, if her demand for imports is elastic, then the imports of the country will be significantly reduced by devaluation, which in turn would improve the balance of payments of the devaluing country.

However, some rule is needed to relate the required degrees of elasticities for the success of devaluation in improving the balance of trade. In this connexion we have what are called the **Marshall-Lerner Conditions**. According to it, devaluation will improve the balance of trade of a country if the sum of the elasticities of demand for imports and exports is greater than one. When the sum of these elasticities is equal to one, devaluation will leave the size of the deficit unchanged; and when this is less than one, it will make the balance of payments worse than before.

It should be noted here that the Marshall-Lerner conditions relate only to the demand for commodity exports and imports. The response of capital, both official and private, to devaluation must also be taken into consideration before it can be determined whether devaluation will improve the balance of payments. (This is because of the fact that both the current account and the capital account constitute the balance of payments of a country). Then, if sufficient amounts of autonomous capital flow into the devaluing country, it would be possible to have the sum of elasticities of demand less than one and yet devaluation may lead to an improvement in the balance of payments of the devaluing country. If the country has investment opportunities and the devaluation is sufficient to allay fears of further devaluation, then capital will feel induced to flow into the country in search of profits. On the other hand, if the flow of capital is reduced, as a result of devaluation, then the devaluation even with the sum of the elasticities greater than one, will aggravate the deficit. This would occur, if capital were discouraged by devaluation and investors fear further devaluation.

The success of devaluation in improving the balance of trade also depends on the reactions of her



trading partners. If the trading partners retaliate, then devaluation will not make any impact on the imports or exports of the devaluing country, even though her demand of imports and exports may be elastic.

(v) Finally, there is the method of exchange control. We know that deflation is dangerous; depreciation has a temporary effect and may provoke others also to depreciate; and devaluation hits the prestige of a country. These methods are, therefore, avoided and, instead, foreign exchange is controlled by the government. All the exporters are ordered to surrender their foreign exchange to the central bank, and it is then rationed out among the licensed importers. None else is allowed to import goods without a licence. The balance of payments is thus rectified by keeping the imports within limits. (Exchange control is discussed in detail in the next chapter.)

When gold standard was effectively at work in most countries, disequilibria in international payments were automatically corrected to a fair degree. Some economists have recently expressed the opinion that changes in levels of national incomes can restore the equilibrium. Increase in exports, for instance, increases national income which, in its turn, adds to our capacity to purchase from abroad. This means that the imports will also increase and an equilibrium between exports and imports maintained. But modern economic analysis has shown that increase in imports will only partially cover up exports, because some portion of national income is bound to leak into domestic savings and not used for imports. Thus, change in prices or exchange rate will be essential for full equilibrium.

After the Second World War was evolved a new international machinery for maintaining equilibrium in the balance of international payments and for correcting disequilibrium when it does arise. This new machinery is the International Monetary Fund (I.M.F.), which we shall discuss in Chapter 59. It may, however, be mentioned here that no country now need be forced into deflation (and so depression) to root out the causes underlying disequilibrium as had to be done under the gold standard. On the contrary, the I.M.F. provides a mechanism by which changes in the rates of foreign exchange can be made in an orderly fashion.

**Conclusion.** In short, correction of disequilibrium calls for a judicious combination of the following methods:—

- (i) Monetary and fiscal changes affecting income and prices in the country;
- (ii) exchange rate adjustment, *i.e.*, depreciation or appreciation of the home currency;
- (iii) trade restrictions, *i.e.*, tariffs, quotas, *etc.*; and
- (iv) capital movement, *i.e.*, borrowing or lending abroad.

No reliance can be placed on any single tool. There is room for more than one approach and for more than one device. But the application of the tool depends on the nature of disequilibrium. There are, we have said, four types of disequilibrium, two in income (cyclical and secular) and two in price or structural (at the goods and the factor level). It is more appropriate that the cyclical and secular disequilibria be tackled by monetary and fiscal measures. In structural disequilibria, exchange rate adjustment plays a greater role. Generally, trade restrictions should be avoided. Capital movements buy time in short-run disturbances and are needed to offset deep-seated forces in secular disequilibrium.

The main methods of desirable adjustment are, therefore, monetary and fiscal policies which directly affect income, and exchange depreciation which affects prices in the first instance. It can also have income effect through price effects. Monetary and fiscal policies affect relative prices also.

### ECONOMIC DEVELOPMENT AND BALANCE OF PAYMENTS

It is the usual experience of all developing economies to have serious difficulties in their balance of payments. This will be clear if we analyse the requirements of development and some of its consequences.

The balance of payments has two aspects, *viz.*, the import aspect and the export aspect. On the imports side, we can easily see that in the initial stages of development; the import bill must rapidly mount up from year to year. The country which has chosen the road to rapid economic development must be prepared to face heavy imports. What is being attempted is the conversion of a predominantly agrarian economy into a highly industrialised economy within a reasonable span of time. For this purpose, the country needs machinery, equipment and industrial raw materials. It must also import technical know-how. All these things an under-developed country lacks and for them it must rely on foreign countries. An under-developed country also lacks capital. It has, therefore, to borrow capital from abroad. The loans have to be repaid and it has to meet yearly liabilities arising out of interest payments. All these developments tilt the balance of payments against the developing economy.

Now let us see the export side. A developing country must build up, of course, an export surplus to pay for constantly pouring imports. But in the early stages of development, it is unable to export much. It has yet to build up export industries. Most of the domestically produced materials are absorbed in the home manufactures. Nor can it spare capital for investment abroad, because under-developed countries suffer from serious capital deficiency. The



country is also not advanced enough to export services of any type. Most of the goods and services produced at home are absorbed at home in a rising tempo of economic development.

The rising tempo of development expenditure fed by deficit financing unleashes the inflationary forces so that the country is good for selling to and not a good country to buy from. Inflation, therefore, adversely affects the balance of payments position.

Rising imports and lagging behind or stagnant exports lead to the widening of the deficit on current account and there is a widening gap on the capital account too. The balance of payments becomes increasingly unfavourable from year to year as development programme proceeds apace.

How is this situation met? It is the generosity of foreign friendly countries which comes to the rescue. Foreign aid in the form of loans is sought and obtained. In addition, foreign exchange reserves are drawn upon. International organisations like the I.M.F. also come forward to help the country out of the balance of payments difficulties.

But no country can go on borrowing from abroad indefinitely, if it is to retain its credit-worthiness in international financial circles. Foreign reserves are not a bottomless pool. Ultimately, the country must stand on its own legs and move to a stage called self-sustained growth. At this stage, it must find out of its own resources all the means for economic development. It should be able to do without foreign aid. It must meet its import bill out of its own export earnings. The export earnings should be sufficient to cover not only development imports but also maintenance imports. It is neither desirable nor feasible to cut down imports (except the non-essential ones) without hampering economic development. The development targets must be achieved and essential imports must continue to flow. Hence, vigorous and determined drive in the direction of export promotion is essential. It is the only sane course to adopt.

Economic development in India illustrates the effect of economic development on balance of payments position. India has been facing serious difficulties in regard to her balance of payments since the beginning of the Second Five-Year Plan. Unable to produce herself all the machinery, equipment and materials, it had to look for foreign supplies. In the process of financing these imports, the country was faced with large deficits in balance of payments. The First Five-Year Plan, however, was a pleasant surprise. As against original estimate of the average annual deficit of Rs. 180-200 crores, the actual total deficit for the five-year period was only Rs. 126 crores. Instead of drawing down of Rs. 290 crores of sterling balances, envisaged in the Plan, the actual draft was Rs. 138 crores only. A series of bumper crops contributed to this happy

result. Also, the process of economic development had hardly begun.

But things assumed their true complexion since the beginning of the Second Plan. There was a total deficit of Rs. 1721.6 crores on current account over the period of the Second Plan. During the Third Plan, the balance of payments position became even worse. The deficit on current account rose from Rs. 306.4 crores in 1961-62 to Rs. 473.3 crores in 1965-66. The total for the Third Plan amounted to Rs. 2,600 crores and the total deficit in current account for the three annual plans period (1966-1969) amounted to Rs. 2,414 crores.

However, the balance of payments position improved during the Fourth Five-Year Plan. The total deficit in the country's balance of payments during the first four years of the Plan (1969-70 to 1972-73) amounted to Rs. 1,202 crores. This represented a remarkable improvement in spite of the fact that there was a considerable set-back to agricultural production during this period. India's trade deficit, which was Rs. 432 crores in 1973-74, deteriorated markedly to Rs. 1,190 crores in 1974-75. This was mostly due to the hike in prices of 3 F's (Fuel—crude oil and petroleum products. Fertilizers and Foodgrains). The trade deficit continued in its upward trend in the year 1975-76. (Rs. 1,222 crores).

In 1976-77, however, we turned the corner and, for the first time, we had a trade surplus of Rs. 72 crores as against a huge deficit of Rs. 1,222 crores in 1975-76. Exports increased by 27% over the previous year, whereas the imports contracted by 7%. This means that the drive to expand exports and to diversify export products and destinations over the last few years has paid rich dividends. The foreign exchange reserves had already by the end of March 1978 reached the high level of Rs. 4,500. These were exclusive of gold (Rs. 193 crores) and SDR's (Rs. 162 crores).

Our foreign exchange reserves in 1950-51, when planning era commenced, were of the order of Rs. 951 crores and by 1960-61 they had fallen to Rs. 304 crores, less than half of what they were when Planning started. During the Third Plan, they fell continuously except in 1963-64, to Rs. 298 crores in 1965-66. Since then, however, the position improved, the foreign exchange reserves rising to Rs. 577 crores at the end of 1968-69 and further to Rs. 581 crores at the end of the Fourth Plan in 1973-74 and to Rs. 611 crores at the end of March 1975. Since then they have shown a sustained upward trend and by March-end 1978 and March-end 1979 they had shot up to Rs. 4,500 crores and 5220 crores, respectively.

However, with widening trade gap on account of ever-rising prices of crude oil by the OPEC and with the slowing down of sterling remittances by Indians abroad, foreign exchange reserves started their



downward movement from September-end 1979 (by which time they had reached the record figure of Rs. 5,636 crores) and had fallen substantially to Rs. 4,822 crores by March-end 1981 and further to Rs. 3,334 crores by December-end 1982.

#### Balance of Payments Review 1974-78

In the Fifth Plan (1974-79), exports were projected to grow at the annual rate of 8.5 per cent at constant prices. But this target was exceeded and the growth of exports averaged 10 per cent a year in constant prices. In 1977-78 the growth was only 5 per cent. Earnings from exports rose from Rs. 2,523 crores in 1973-74 to Rs. 5,146 crores in 1976-77, (a growth rate of 27 per cent per annum) and to Rs. 5,404 crores in 1977-78. The imports were projected to be Rs. 28,524 crores in the Fifth Plan. Actual imports turned out to be Rs. 4,519 crores in 1974-75, Rs. 5,265 crores in 1975-76, Rs. 5,074 crores in 1976-77 and Rs. 6,025 crores in 1977-78. The inflow of non-commodity export receipts, properly known as remittances from abroad, has been quite substantial. These remittances virtually produced a current account surplus. Invisibles are now an important source of foreign exchange in-flow. The monthly level of inflow has more than doubled in recent years. The inflow of foreign aid began to show upward trend since 1973-74. The volume of net foreign aid averaged Rs. 1,080 crores in the Fifth Plan projections.

#### Sixth Plan Projections (1980-85)

The Sixth Plan anticipates that the balance of payments problems facing the country during the Plan period are likely to be acute and will require innovative approaches to cope with the situation.

Table 7 gives India's balance of trade for 1979-80 and the projection for 1984-85. Table 8 sets out the balance of payments projection for the entire period of the Plan, i.e. 1980-85.

Exports during the Sixth Plan are projected to grow at a compound rate of 9 per cent (in volume terms). This is a rate much faster than the one observed (6 per cent) in the last decade. Thus, exports are projected to increase from Rs. 6,420 crores in 1979-80 to Rs. 9,878 crores by the end of the Plan. Despite this substantial growth in exports and net inflows of external aid of Rs. 5,889 crores (see Table 8) there will still be a gap in the balance of payments. This is proposed to be met partly from the country's own foreign exchange reserves which will be drawn down to the extent of Rs. 1,000 crores and partly from additional capital inflows from abroad, including borrowings from commercial sources.

According to the Plan document, the task of balance of payments policy for the Plan period would be to contain the balance of payments gap within the limits projected and this would require the realisation of the target of export growth of 9 per

cent in volume terms, to contain the growth of imports to 7.9 per cent (excluding contingency imports) per annum, to continue to attract remittances from abroad and to promote the earnings from tourism and other sources of foreign exchange.

Table 7:  
Sixth Plan: Balance of Trade (1979-80 and 1984-85)

| (Rs. crores at 1979-80 prices)               |                     |                        |
|--|---------------------|------------------------|
|  | 1979-80<br>(Actual) | 1984-85<br>(Projected) |
| 1. Exports                                   | 6,420               | 9,878                  |
| 2. Imports (of which<br>contingency imports) | 8,790               | 13,850<br>1,000        |
| 3. Balance of Trade                          | (- ) 2,370          | (- ) 3,972             |

Table 8:  
Sixth Plan: Balance of  
Payments Projections (total for 1980-85)

| Account                                      | Rs. crores at<br>1979-80 prices |         |
|--|---------------------------------|---------|
| <b>A. Current Account</b>                    |                                 |         |
| 1. Exports                                   |                                 | 41,078  |
| 2. Imports (of which contingency<br>imports) |                                 | 58,851  |
| 3. Balance of Trade                          | (- )                            | (4,911) |
| 4. Invisibles                                |                                 | 17,773  |
| 5. Current Accounts                          |                                 | 8,710   |
| Net  | (- )                            | 9,063   |

#### B. Capital Account

|  |            |
|--|------------|
| 1. Net Aid   | 5,889      |
| 2. Other borrowings including com-<br>mercial borrowings, and other capi-<br>tal inflows | 5,087      |
| 3. Drawal on foreign exchange reserves   | 1,000      |
| Total 1 to 3   | 11,976*    |
| 4. Depletion of resources due to trade<br>deterioration                                  | (- ) 2,913 |
| 5. Net inflow  | 9,063      |

\*Of this total, the resources available for financing public sector outlays will be Rs. 10,929 crores.



Obviously, it is the supply of, and the demand for, foreign currency that would determine at any time the rate of exchange of a country's currency just as the market price of commodities is determined by the forces of demand and supply. We also know how the demand for, and supply of, foreign currency (or conversely supply of, and demand for, home currency) arise. When the supply is equal to demand, the rate of exchange is said to be at par. If supply of foreign currency is greater than demand, the value of the foreign currency falls below (or of the home currency rises above) the par. And conversely, if the demand for foreign currency is greater than supply thereof, the value of foreign currency rises above (or of the home currency falls below) the par.

Up to what limits can the exchange rate rise above, or fall below the par? These limits are determined differently under different conditions. The par of exchange also has different meanings under different conditions.

We shall see how rate of exchange is determined under different monetary systems.

#### Rate of Exchange under Gold Standard

When the two countries concerned are on gold standard (none now) as already explained, their currency units are either gold coins or are convertible into gold at fixed rates. Moreover, gold freely moves between the countries. The par of exchange between such countries is called the "mint par of exchange". This is arrived at by equating the

amount of gold contained in the currency units (or given in exchange for them by currency authorities respectively) of the two countries.\* There can be no mint par between a gold standard and a silver standard country.

For instance, before 1914, England and France were both on gold standard. Their mint par of exchange could be calculated as above.

The mint par between London and Paris was 25.2215 francs to £ 1. If the exchange is at par, under these conditions a French importer would get £ 1 in London by paying 25.2215 francs in Paris to meet his liability. An English importer would get 25.2215 francs in Paris by paying £ 1 in London.

**Specie Points.** Now suppose the French people have to make more payments to the English people than the latter have to make to the former. The demand for the English currency in France will be greater than its supply. The value of the £ will rise in terms of the francs. The French importer will have to pay more than 25.2215 francs in order to get £ 1 in London.

But how much more will he be willing to pay? We have already said that an importer will send gold if he can get it and thinks it cheaper to send it. Gold standard countries always provide gold in exchange for their currency and allow it to leave the country. But gold involves cost of transport (shipping, insurance, interest charges, etc.) when it has to be sent out. The importer in France will, therefore, only send gold if the rate of exchange is higher than the par to the extent of more than the cost of transporting gold from Paris to London.

|                                 |  |
|---------------------------------|--|
| * One English Sovereign         | = 7.98815 grammes of gold 11/12 fine   |
|                                 | = 7.32238 grammes of pure gold.  |
| One French Napoleon (20 francs) | = 6.45161 grammes of gold 9/10 fine  |
|                                 | = 5.80645 grammes of pure gold.  |
| Therefore, one Sovereign        | $= \frac{7.32238 \times 20}{5.80645} \text{ francs} = 25.2215 \text{ francs.}$ |



Suppose the cost of transporting 25.2215 francs worth of gold from Paris to London is .3 franc. Then it will be worthwhile sending gold if the exchange rises above 25.2215 francs to the £ by more than .3 franc. If the exchange actually rises above this point, gold will begin to move out from France to England. This point is thus called gold export point from the point of view of France and gold import point from that of England. This point is obtained by adding the cost of transport to the mint par of exchange. It is also called the **gold export point or the upper specie point**.

In the same way, there is a **lower specie point**, or **gold import point** for France and gold export point for England. This is obtained by deducting the cost of transport from the mint par. In the above example, it will be 24.9215 francs to the £. If the exchange falls below this point, the English importers will send gold rather than purchase title to francs.

**Two Limits.** Thus, if gold is available and is allowed to move freely between two countries (on gold standard), the rate of exchange will move between the two limits set by the upper and the lower gold points, also called the "specie points". If, however, gold is not available, the rate of exchange will pass beyond the specie points. These are the two limits within which the fluctuations will be caused by the changes in supply of, and the demand for, foreign currency, *i.e.*, bills, drafts, T.T.s, *etc.*

#### Exchange between Gold and Silver Standards

The above is a case where both the countries concerned are on gold standard (none now). If, however, one is on gold standard and the other on silver standard, the par of exchange will be determined by the price of gold in terms of silver in the country on silver, and price of silver in terms of gold in the gold standard country. This discussion is now of purely academic interest.

### PURCHASING POWER PARITY THEORY

#### Exchange between Inconvertible Paper Currencies

But the most difficult case is that of countries both having inconvertible paper currencies. Suppose England and France were both on paper currency inconvertible into metal. Then, how many francs would have to be paid to get a £ sterling? Obviously, as many as would have the same purchasing power in France as one £ has in England. If £1 in England purchases a collection of X commodities, then £1 will purchase as many francs in France as will buy the same collection of X commodities in France allowing for the cost of transporting commodities from one country to the other.

Let us suppose that in England £1 purchases X commodities and in France, X commodities cost 25 francs. Then the rate of exchange will obviously tend to be

$$£1 = 25 \text{ francs.}$$

Now suppose the price levels in the two countries remain the same but somehow exchange moves to

$$£1 = 30 \text{ francs.}$$

This means that the purchasing power of £1 in France is more than 25 francs. It will pay people to convert £ sterling into francs at this rate, purchase X commodities in France for 25 francs and sell them in England for one £ again, making a profit of 5 francs per pound worth of transaction. This will create a large demand for francs in England, while supply thereof will be less because very few people would export commodities from England to France. The value of the franc in terms of the £ will, therefore, move up until it reaches £1 = 25 francs. At that point, imports from France will not give abnormal profits. £1 = 25 francs is called the **Purchasing Power Parity** between the two countries.

"While the value of the unit of one currency in terms of another currency is determined at any particular time by the market condition of demand and supply, in the long run that value is determined by the relative values of the two currencies as indicated by their respective purchasing powers over goods and services. In other words, the rate of exchange tends to rest at the point which expresses equality between the respective purchasing powers of the two currencies. This point is called the **Purchasing Power Parity**."<sup>1</sup>

Thus, under a system of autonomous paper standards the external value of a currency is said to depend ultimately on the domestic purchasing power of that currency relative to that of another currency. In other words, exchange rates, under such a system, tend to be determined by the relative purchasing powers of respective currencies in different countries.

In the above example, if prices in France get doubled, the value of the franc will be exactly halved. The new parity will be £1 = 50 francs. This is because now 50 francs will buy X commodities in France which 25 francs did before. We suppose that prices in England remain constant. But if prices in both countries get doubled, there will be no change in the parity.

Thus:—

$$£2 = 50 \text{ francs.}$$

$$£1 = 25 \text{ francs.}$$

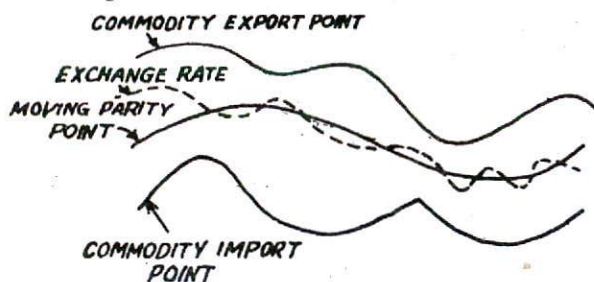
In actual practice, however, the parity will be

1. Thomas, S.E.—*Elements of Economics*.



modified by the cost of transporting goods (including duties, etc.) from one country to another.

Thus, between countries on inconvertible paper, the place of the mint par is taken by the purchasing power parity. The difference is that the former is a fixed par while the latter moves with movements of the price levels in the two countries concerned. Day-to-day fluctuations around this par will take place as before due to change in the supply of and demand for the currency in question as shown by the diagram below. The limits to these fluctuations



will be set by the cost of transporting goods from one country to another. Hence, these limits will not be definite as were the specie points. The above diagram illustrates these points.

#### Critical Evaluation of the Purchasing Power Parity Theory

This theory was popularised after World War I by Gustav Cassel, a Swedish economist. "The rate of exchange between two currencies," wrote Cassel, "must stand essentially on the question of the internal purchasing power of these currencies." This is easily seen if we reflect on the fact that the price paid in a foreign currency is ultimately a price which must stand in a certain relation to the prices of commodities on the home market." But the theory is criticised on several grounds:—

(i) The strongest point of criticism is that the purchasing power parity theory compares the general price-levels in the two countries and not merely the price-levels of goods actually entering international trade. The prices of the latter kind of goods, of course, are the same in all countries allowing for the cost of transportation, tariff, etc. It is quite easy to verify the theory if we only compare prices of internationally traded goods. In fact, when its application is confined to such goods, it becomes an empty truism, because, as Halm says, "it is obvious that the national prices of internationally traded goods tend to equality as between different markets when translated into each other at the current exchange rates."

But, when we try to compare the index numbers of the prices of the whole mass of goods marketed in

the countries concerned, the rate of exchange will not always conform to the points thus determined. This is so because price of domestic goods may not move in the same direction, at least not in the short period, as of those entering into international trade.

(ii) The theory is true only in the long run. In the long run, the rate of exchange and price-levels will tend to move in the same direction, especially if international trade is a major factor in a country's economic life. The theory, therefore, only holds good in the long period. Even in the long period, the theory will be valid only if the essential conditions of international trade remain unchanged. But such conditions seldom remain unchanged. For instance, the barter terms of trade are constantly in a process of change between countries due to change in the demand for foreign goods or changes in the condition of supply of domestic goods.

(iii) Further, there is no permanence about the goods which do or do not enter into international trade. This depends on the rate of exchange itself. If the price of foreign currency goes up, it will make profitable the export of some hitherto domestic goods, and vice versa.

(iv) Moreover, changes may occur in the volume of foreign loans, cost of transport or in any other items of invisible balance of trade. Changes in barter terms thus brought about may disturb the relationship between the price-levels, and the parities based on such price-levels may not correspond to the rate of exchange. As Cassel observes, "Differences in the two countries' economic situation, particularly in regard to transport and customs, may cause the normal exchange rate to deviate to a certain extent from the quotient of the currencies' intrinsic purchasing powers".<sup>3</sup> If a country puts up tariffs, the exchange value of the currency will rise but its price-level will remain the same.

(v) Besides, many items of balance of payments like insurance and banking transactions and capital movements are very little affected by changes in general price-levels. But these items do influence exchange rates by acting upon the supply of, and the demand for, foreign currencies. The Purchasing Power Parity Theory ignores these influences altogether.

(vi) The theory, as propounded by Cassel, says that changes in price level bring about changes in exchange rates but changes in exchange rates do not cause any change in prices. This latter part is not true, for exchange movements do exercise some influence on international prices.

(vii) **Keynes' Criticism.** According to Keynes, there are two basic defects in the purchasing power parity theory, viz., (i) it does not take into consideration the elasticities of reciprocal demand, and (ii) it

2. *Monetary Theory*, 1964, p. 224.

3. Cassel, G.—*Money and Foreign Exchange After 1914*, P. 139.



ignores the influence of capital movements. In Keynes' view, foreign exchange rates are determined not only by the price movements but also by capital movements, the elasticities of reciprocal demand and many other forces affecting the demand for, and supply of, foreign exchange.

"By elasticity of reciprocal demand is meant the responsiveness of one country's demand for another country's exports with respect to price or income." As for price elasticity, generally speaking, greater the proportion of luxuries and semi-luxuries in the exports demanded, the more elastic will be the country's demand for another country's exports. It will also be more elastic, the greater the number of alternative markets in which to buy and greater the capacity to produce the effective substitutes for goods imported. As for the income elasticity of demand for imports, changes in demand for goods and services and in the derived demand for foreign exchange is functionally related to the changes in national income. How far is one country's demand for another's exports responsive to a change in its national income? That will influence the rate of exchange. In other words, it is the character of the propensity to import out of a given income that is supposed to affect the exchange rates independently of international price movements.

(viii) Technological improvements adding to the productivity of the country and making its goods cheaper and better, tariff changes and export subsidies affect exchange rates via their influence upon reciprocal demand quite independently of international price movements.

(ix) Capital movement, both short-term and long-term, are the other important influences. There is 'hot money' flying from a country trying to make profit or avoid loss on exchange fluctuations and there is a 'refugee capital' seeking safety and security abroad. An actual or expected change in the domestic price of a foreign currency may lead to inflow or outflow of 'hot money' causing a further change in the exchange rate without there being price changes in either country. The inflow tends to raise the exchange value of the country of the capital receiving country and outflow will lower it. Long-term movement of capital also has a similar effect.

Thus, there is no direct link between the purchasing power parity of the currency and its rate of exchange, because there are several other factors too which affect the rate of foreign exchange, e.g., tariffs, speculation, capital movements, etc.

In conclusion, we may say that the Purchasing Power Parity Theory attempts to explain the ultimate rather than the immediate forces determining the rate of exchange.

**Its Superiority.** The theory is applicable to all currencies. It is superior to the old theory according to which the rate of exchange was determined by

balance of indebtedness. This theory goes even to the root of the balance of indebtedness. It explains how balance of trade, of indebtedness itself, is determined. This theory lays proper emphasis on the influence of price-levels on the determination of rates of exchange.

The actual rate at any particular moment may diverge from the equilibrium rate as indicated by the purchasing power parity due to the various factors affecting the terms of trade or the balance of payments for the time being.

### MODERN THEORY OF EXCHANGE RATE DETERMINATION

In view of the defects pointed out above, the purchasing power parity theory does not offer an adequate and satisfactory explanation of the fluctuations in the rates of exchange. The determination of the exchange rate depends not only on international price relations but also on many other factors as mentioned above. This leads us to a more adequate explanation of the determination of foreign exchange rates, viz., balance of payments theory or demand and supply theory.

#### Demand and Supply Theory or Balance of Payments Theory

The most satisfactory explanation of the determination of the rate of exchange is that a free exchange rate tends to be such as to equate the demand and supply of foreign exchange. For example, the external value of the rupee in Bombay depends on the demand for, and supply of, rupees on the foreign exchange market in Bombay. The demand for rupees comes from those who offer foreign exchange in order to obtain rupees, while the supply of rupees comes from those people who are offering rupees to obtain foreign exchange. The Indian exporters to England, for instance, constitute the demand for rupees, for they have a claim on pound sterling which they want to convert into rupees; and the Indian importers, who have to make payments to England, offer rupees in order to get pound sterling.

The intersection of the sterling-supply curve and the sterling-demand curve gives the equilibrium price of sterling that equates the amount of pound sterling offered and the amount of pound sterling demanded. If the equilibrium pound sterling price in Bombay is Rs. 18 per pound sterling, the equilibrium price of the rupee on the London market is the reciprocal of Rs. 18, i.e., 1/18 of a £.

Now, what lies at the back of demand for, and supply of, foreign currency? These are the various items in the country's balance of payments. The demand for foreign exchange arises from the debit items in the balance of payments, whereas the supply of foreign exchange arises from credit items. The debit items relate to all payments made durin,



a given period by residents of the country to foreigners, and credits include all payments received during the given period from foreigners by the residents. These payments may be on any account, e.g., goods bought and sold, services rendered and received, capital borrowed or lent, and so on.

If India has a net debit, its demand for foreign exchange, say pound sterling, must exceed its supply of pounds sterling with the result that the rupee price of pound sterling will go up, or, what comes to the same thing, the external value of the rupee must go down relative to pound sterling. The rupee becomes cheap in terms of £. Conversely, a net credit in India's balance of payment will lead to a fall in the rupee price of £, which means a higher value of the rupee or expensive rupee relative to the £.

It is well to remember that the demand for, and supply of, foreign exchange in the final analysis is nothing else than the demand for, and supply of, foreign goods and services. As already mentioned, the supply of foreign exchange arises from the credit items in the balance of payments, while the demand for foreign exchange results from the debits. In other words, the debit and credit items in the balance of payments constitute respectively the demand for, and supply of, foreign exchange.

These items can be put in the form of a balance sheet as under:—

| Debits (demand)  | Credits (supply)   |
|--|--|
| 1. Commodity imports.  | 1. Commodity exports.  |
| 2. Services rendered by foreigners.  | 2. Services rendered to foreigners.  |
| 3. Travel expenditure by Indian nationals abroad.  | 3. Travel expenditure by foreigners in India.  |
| 4. Interest and dividends on Indian securities owned by foreigners.  | 4. Interest and dividends on foreign securities owned by Indians.  |
| 5. Remittances and charitable contribution by Indian nationals.  | 5. Remittances and charitable contribution by foreigners to Indians.   |
| 6. Government expenditures by Indian Government abroad.  | 6. Government expenditures in India by foreign nations.  |
| 7. Exports of long-term capital (i.e., import of foreign stocks and bonds, Indian direct investment abroad and loans to foreigners). | 7. Import of long-term capital (i.e., export of stocks and bonds to India by foreigners, foreign direct investment in India and foreign loans to India). |

- |  |   |
|--|---|
| 8. Export of short-term capital (i.e., increase of Indian bank balances abroad). | 8. Import of short-term capital (i.e., increase of foreign owned bank balances in India). |
| 9. Gold imports.   | 9. Gold exports.  |
| 10. Miscellaneous import items.  | 10. Miscellaneous export items.   |

The balance sheet contains items both on current account (items 1 to 6) and capital account (items No. 7 and '8). Among these items, the largest single source of demand for, and supply of, foreign exchange is represented by commodity exports and imports, though the quantitative significance of the various items differs from country to country.

The balance of payments is said to be adverse if the total of visible and invisible imports exceeds those of exports. The country is then said to have been deficit on current account which must be paid off by drawings on foreign exchange reserves or by exporting gold or by borrowings for short terms from the I.M.F. or from the creditor countries. Conversely, a favourable balance of payments means that the invisible and visible exports together exceed the invisible and visible imports. Then the country has a surplus on current account and is accumulating claims on foreign currencies.

When the balance of payments is unfavourable, the country is said to have a weak exchange rate position. There will be increase in the demand for foreign exchange relative to the supply thereof because more payments have to be made than receiving payments from abroad. In this case, there will be decline in the external value of the domestic currency. But the depreciated external value of its currency will stimulate exports and help it to wipe out the deficit.

If a country has a surplus on current account, it is said to have a favourable balance of payments. There are more people abroad who have to make payments to this country. The demand for this country's currency will increase on the part of the holders of foreign currency. The result will be that the external value of the domestic currency will appreciate.

This is how the balance of payments affecting demand for foreign exchange and supply of foreign exchange determines the rate of exchange.

#### Evaluation of The Balance of Payments Theory

**Superiority.** The balance of payments theory of exchange rates is superior because (a) it facilitates equilibrium analysis; (b) it is more realistic because the price of foreign currency is seen here as a function of many significant variables and not merely purchasing power expressed in general price level, and above all (c) it clearly shows the possibility of adjusting balance of payments disequilibria through exchange rate adjustment rather than



through domestic price deflation as implied by the purchasing parity theory.

**Criticism.** The balance of payments theory is criticised on the following grounds:—

(i) It is unrealistic because it assumes perfect competition and absence of all interference with the movement of money from country to country.

(ii) It follows from this theory that there is no causal connection between the rate of exchange and the internal price level. Actually, there is a close connection between the two, because price-cost structure affects the balance of payments position.

(iii) The theory assumes that the balance of payments is a fixed quantity. Actually it is not so. It varies with the changes in the internal and external price levels.

(iv) The balance of payments theory is a mere truism, *i.e.*, it is self-evident.

### EQUILIBRIUM RATE OF EXCHANGE

After fluctuations, the rate of exchange may reach a certain comparatively stable level which may be called an **equilibrium rate**. In the history of Indian currency, we read about the battle of ratios; 18d. vs. 16d. Which was the correct ratio? The advocates of each ratio said that, at the rate they recommended, there was proper adjustment between the rate and other economic factors like prices, wages, interest rates, *etc.* In short, it was the equilibrium rate. **When all relevant factors have been taken into consideration, the rate which is the most suitable may be called the equilibrium rate.** It is correct rate; at this rate there are no disharmonies in the economic system, *e.g.*, there is no cost-price disparity, and no sector of the economy shows any sign of maladjustment or disequilibrium.

The equilibrium rate of exchange has been defined as "the rate which, over a certain period, maintains the balance of payments in equilibrium without any net change in the international currency reserves". It has also been defined "as one that maintains the balance of payments equilibrium without a degree of unemployment greater than in the rest of the world."<sup>4</sup> We may also say that the equilibrium rate is one at which the demand for currency would be equal to the supply of it and no account is taken of speculative and abnormal capital movements. It expresses a balanced relationship between different economies. At the equilibrium rate, the domestic currency is neither undervalued nor overvalued in terms of foreign currency, so that neither it gives an artificial stimulus to exports nor to imports. It remains neutral.

Scammel has defined equilibrium rate of exchange thus:<sup>5</sup>

"An equilibrium rate is that rate which, over a standard period, during which full employment is maintained and there is no change in the amount of restriction on trade or on currency transfer, causes no net change in the holding of gold and currency reserves of the country concerned".

Halm mentions the following criteria of an equilibrium rate<sup>6</sup>:—

(i) It should be in conformity with an average degree of domestic stability. For instance, as has already been said, unemployment inside should not be greater than unemployment outside.

(ii) It should not be necessary to overstrain the national gold reserves nor should it lead to depletion of foreign balances to maintain this rate. If domestic currency has to be contracted for the maintenance of the exchange rate which causes depression or impedes recovery, it is obviously not an equilibrium rate.

(iii) It should not offer any artificial advantage or inflict any out-of-the-way disadvantage on foreign trade. It should remain completely neutral in matters affecting costs, prices and demand of the other countries connected with foreign trade relationship.

### FLUCTUATING vs. FIXED EXCHANGE

#### Case for Flexible Exchange

Should the rates of exchange be left to take care of themselves, free to move in any direction, or should they be kept stable? Something can be said in favour of each course. The following arguments have been put forward in favour of flexible rates of exchange:

(i) The advocates of flexible rates of exchange say that a system of free rates enables a country to pursue an independent economic policy. Its monetary policy is not tied down rigidly to a certain rate of exchange to maintain which it may have to deflate its currency and plunge the country into depression and unemployment.

(ii) Internal stability is a better aim to pursue. Hence, a country should look to internal stability, *i.e.*, stability of prices, output and employment and leave the exchange rates to vary as they would. Such a policy would eliminate outside interference with internal economy.

5. Scammel, W. M., *International Monetary Policy*, p. 56.

6. *Monetary Theory*, 1946, p. 219.

7. See League of Nations—*International Currency Experience*, 1944, pp. 41-52 and also C' 11.

4. *International Currency Experience*, pp. 124 and 126 respectively.



(iii) The rate of exchange has an equilibrating influence on the balance of payments and it is better, it is said, to let this equilibrating factor work freely and automatically.

(iv) The rate of exchange acts as a shock absorber. If the rates of exchange are kept rigidly fixed, the shocks of inflation and deflation from abroad are transmitted to the internal economic system. But variations in the rates of exchange can ward off the invasion of the inflationary and deflationary forces.

(v) It is also asked: "If demand and supply formula works so excellently in all economic spheres, why not in the foreign exchanges?" Hence, it is better to leave the rate of exchange be freely determined by the forces of demand and supply.

(vi) Flexible exchange is in no way detrimental to the smooth flow of international trade. The importers and exporters are able intelligently to anticipate the trends in exchange rate and protect themselves by means of forward exchange rate transactions. Fixed rates are of no particular advantage to international trade.

(vii) Fluctuating rates of exchange do not discourage long-term investments as it is supposed. The investors can never be sure of any fixed rate of exchange for decades to come. Hence, fluctuating rates cannot be rejected on the ground of long-term investment.

#### Case for Fixed Exchange

There seems to be a great deal of force in the above arguments, but the policy of free fluctuating rates of exchange has been almost universally abandoned on the following grounds<sup>8</sup>:—

(i) Since variations in rates of exchange affect imports and exports, a policy of fluctuating exchanges is inimical to domestic stability. It will necessitate constant reshuffling of the national resources as between the import industries and export industries, which may involve waste besides making the internal economy precarious.

(ii) A fluctuating rate of exchange adds to the hazards of international trade, and, by making it risky and uncertain, proves prejudicial to its healthy growth. A fixed rate of exchange, on the other hand, ensures a smooth flow of international trade. The importers and exporters go on confidently in their business believing that the existing rate of exchange will be maintained.

(iii) Under a system of fluctuating exchange, there are always anticipatory dealings in foreign currencies which lead to self-aggravating and cumulative movements in the rate of exchange making it highly unstable. If, therefore, there is merely an anticipation of exchange depreciation, it

proves dangerous and leads to flight of capital. Thus, fluctuating exchanges cannot always be relied upon to promote adjustment. A fixed rate of exchange eliminates speculative tendencies.

(iv) Fluctuating rates of exchange cause windfall profits and losses. In order to be able to take advantage of a sudden turn in the rate of exchange, businessmen have to maintain a high state of liquidity which means contraction of credit, higher rates of interest and diminution in the volume of employment.

(v) The fluctuating rates are also calculated to discourage long-term international investments, since anything which dislocates internal economy must have a deterrent effect on the prospective investor. A fixed rate of exchange, on the other hand, is said to promote long-term investment.

**Conclusion.** From the above discussion, it is clear that neither fluctuating exchange rates nor rigidly fixed rates would serve the purpose. No exchange rate can be maintained for ever. "While exchange variations are certainly an unsuitable and undesirable means of dealing with short-term discrepancies in the balance of payments, an absolute rigidity of exchange rates in the face of drastic changes in other factors at home or abroad may thus be equally harmful. The general interest may call for an occasional revision of currency values so as to eliminate as far as possible any chronic and structural disparity between price-levels and exchange rates in different countries." That is why there is provision for revision of the rates of exchange in the Articles of the International Monetary Fund. But a start has to be made with a fixed par of exchange. According to Mr. Pierre-Paul Schweitzer, the stability of exchange rates has made a key contribution to the balanced expansion of the world economy. The rate of exchange has a major impact on employment, output, price stability, and other major economic variables.

Since the fixed rates are not feasible and fluctuating rates are not acceptable to most countries, the world is heading towards a hybrid or compromise system of 'crawling pegs' or 'gliding bands'. Under this new system, the exchange parities, with bands round them within which they can move, can float up or down to a maximum of, say, 1 or 2% in a year, which would mean 10 to 20% change in a decade.

#### EXCHANGE CONTROL<sup>9</sup>

The dangers and disadvantages of the fluctuating exchanges have led to the introduction of the system of exchange control.

9. See *International Currency Experience*, Ch. 7 and also Halm, G.N.—*Monetary Theory*, 1946, Ch. XIV, and League of Nations' *Report on Exchange Control*, 1938.

Crowther, G.—*An Outline of Money*, 1950, Ch. VIII.

8. See Halm, G.N.—*Monetary Theory*, 1949, pp. 211-216.



Since World War I, the State has exercised a growing control over the movement of exchange for various reasons.

### Objectives of Exchange Control

The object of controlling exchange is to fix it at a level different from what it would be if the economic forces were permitted free interplay. The objectives of exchange control may be:—

- (a) To correct a serious imbalance in the economy of the country relatively to the outside world; or
- (b) To conserve the country's gold reserves which are being depleted; or
- (c) to correct a persistently adverse balance of payments; or
- (d) to prevent a flight of capital from the country; or
- (e) to conserve foreign exchange reserves for large payments abroad; or
- (f) to maintain stable exchange rate, or
- (g) to ensure growth with stability, and so on.

In all these circumstances, a free exchange would be either embarrassing or prejudicial to the object in view, and exchange control becomes an imperative necessity.

There are three possible courses that a country adopting exchange control may like to pursue, considering the economic situation in which it may find itself. (1) It may like to under-value or depreciate currency; or (2) it may decide on over-valuation; or (3) it may decide to avoid fluctuations and maintain a stable rate. Let us consider when and with what consequences each of these courses may be adopted.

### Under-Valuation

Under-valuation is advocated for curing depression. When a country decides on under-valuation or depreciation, i.e., fixing a rate lower than it would be in a free exchange market, exports are stimulated and imports are discouraged. It will give stimulus to export industries and domestic industries will also benefit because imports have been discouraged. Thus, under-valuation will increase economic activity in the country, add to the total output (GNP) and will create more employment.

But this object may not be fulfilled. Instead of internal prices rising, the external prices may fall. This would happen in the case of a big country like India and the U.S.A. Also, since prices are affected through exports and imports, the desired objective of modifying the price level is more likely to be achieved when foreign trade is extensive than when it forms only a small proportion of the aggregate trade of the country.

10. This discussion leans heavily on Crowther's *Outline of Money*, Ch. VIII.

The policy of under-valuation is more suitable for a country whose exports consist of foodstuffs and raw materials, for during depression, prices of these goods are depressed to a greater extent. Since, however, under-valuation will make the imports dear, the purchasing power of the producers of raw materials and foodstuffs will be reduced. But it is considered more advantageous to prevent a fall in the prices of goods it has to sell than to prevent a rise in those which it has to buy.

During the Great Depression (1929-34), many countries adopted a policy of under-valuation and depreciated their currencies. In fact, there was regular competition in currency depreciation. Every country tried to cure its own depression. The Articles of the I.M.F. now rule out competitive exchange depreciation. If depreciation has to come, it must come in an orderly fashion.

### Over-Valuation

The second object of exchange control may be over-valuation or fixing the value of its currency at a level higher than it would be if there was no intervention in foreign exchange. This course is indicated in the following situations:

(i) When there is a serious imbalance in the country's trade relationship. As a consequence, the supply of national currency may far exceed the demand for it.

(ii) The country may be in great need of foreign goods either for prosecution of a war or for reconstruction after the war or for economic development. If exchange rate were permitted to fall in these circumstances, it would make these much-needed imports very costly, or almost prohibitive. When a country finds itself under the sudden necessity of making large purchases from abroad, over-valuation is found to be most suitable.

(iii) If a country is suffering from inflation, the exchange value of the national currency will go down when exchanges are left free to move. If foreign trade plays a very important part in the economy of the country, this downward trend must be arrested by over-valuing the domestic currency, otherwise imports will become very dear and the exporters will have windfall profits.

(iv) A policy of over-valuation is also in the interest of a country which has to meet a large debt payments expressed in foreign currency. This was the case with our "Home Charges". If the rate of exchange fell, the burden of foreign debt would correspondingly increase.

We cannot lay down dogmatically whether a country should under-value or over-value. It all depends on circumstances. Over-valuation may suit certain countries and under-valuation certain others. The same country may find over-valuation



more suitable at one stage and under-valuation at another. In Crowther's words, "The rough rule-of-thumb, therefore, is: in times of war and scarcity, over-value your currency; in times of slump and over-seit, under-value your currency",<sup>11</sup>

The third course is neither to under-value nor to over-value but to avoid fluctuations. Even here the object is not to keep exchanges rigidly fixed but simply to avoid sudden and big changes. It is intended only to iron out temporary ups and downs and to keep off the adventitious influences. This was done by Exchange Equalization Account. The I.M.F. is also intended to achieve the same objective.

### Methods of Exchange Control

**Influencing Exchange Rate.** Exchange control is exercised either by regulating international movements of goods through various devices or by the purchase and sale of foreign currency at specified rates in order to maintain a particular range of exchange fluctuations. Exchange control can be exercised by influencing demand for, and supply of, currencies in the exchange market. This can be done indirectly by devices like tariffs, quotas, bounties, changes in interest rates, etc. Imposition of import duties and of import quotas will reduce imports, cut down the demand for foreign currency, lower its value or raise the value of the domestic currency. Export duties, which are not so common, will have the opposite effect. Bounties affect the other way about. Export bounty will raise and import bounty (which exists nowhere) will lower the value of the home currency. A rise in the interest rates attracts funds from abroad, increases demand for domestic currency and raises its value, and vice versa.

But these are the ways in which exchange is influenced and not controlled. The effect of such devices can be offset by similar devices adopted by rival nations. These measures are not necessarily adopted for controlling exchange and are not sufficiently strong to bring rates of exchange under effective control. Hence, more direct methods have to be adopted.

**Controlling Exchange Rate.** There are two methods generally adopted for controlling exchange:

(a) **Intervention.** In this case, the government enters the exchange market either to purchase or to sell foreign exchange in order to bring the rate up or down to the desired level. This method has been called intervention and leads to 'exchange pegging' described below. Or, (b) **Restriction.** In this case, the government can prevent the existing demand for, or supply of, the country, in which they are interested, from reaching the exchange market. This method has been called restriction. The second method has

been more popular because intervention proved a weak weapon and was also expensive.

**Exchange Control Proper.** Exchange restriction is exchange control proper. For this three things are done: (a) All foreign dealings are centralised, usually in the central bank; (b) the national currency cannot be offered for exchange without previous permission, and (c) it is made a criminal offence to enter into an unauthorised foreign exchange transaction.

The usual procedure is to order all exporters to surrender claims on foreign currency to the central bank and ration the foreign exchange made so available among the licensed importers. Exchange control thus involves import control. Up to 1939, Germany was a pioneer in the method of exchange control although exchange control was adopted in several other European countries also during the Great Depression (1929-33).

### Forms of Exchange Control

The various forms that exchange control has taken are briefly discussed below:—

**Exchange "Pegging".** This device is usually adopted during war in order to minimize exchange fluctuations. The internal value of a currency may depreciate due to inflation but the government may seek to keep its external value at a higher level than warranted by the purchasing power parity in order to facilitate international transactions. The method was adopted by England during First World War and again in the Second War. Between 1916 and 1919, the sterling was kept artificially pegged at 4.765 dollars—a value which was higher than the real value of the sterling. This was done by raising loans in America and through these funds, purchasing exchange in London at the above rate. Success in exchange pegging evidently depends on the resources at the command of the nation. Exchange pegging can iron out more or less sporadic and adventitious fluctuations and cannot avoid fundamental changes in the equilibrium rates of exchange.

**Exchange Equalisation Account.** Exchange funds were the out-growth of the transformation of the international gold standard convention into an international gold settlement system<sup>12</sup> under which gold came to be used as a balancing item in international trade. After the suspension of the gold standard in 1931 by England, there again arose the necessity of preventing violent exchange fluctuations. For this purpose, the device of the Exchange Equalisation Account (or Exchange Stabilisation Fund) was utilised. "An Exchange Stabilisation Fund is a collection of assets segregated under a

12. For characteristics of the Gold Settlement System, see *International Currency Experience*, p. 155.

11. *An Outline of Money*, 1950, p. 240.



central control for the purpose of intervention in the exchange market to prevent undesirable fluctuations in exchange rate."<sup>13</sup> Foreign currency was purchased or sold, as the necessity arose, with the help of this fund, and thus exchange was kept within a narrow range in the face of uncertain movements of short-term funds into and out of England. The Fund is not used to prevent long-term adjustments in the value of the currency concerned.

The purposes for which Exchange Stabilisation Funds have been used have differed in different countries and in the same country at different stages. "The aim of the British Exchange Equalisation Account was that the Account was designed, without resisting general trends, to iron out undue fluctuations in the exchanges caused by erratic movements of capital and the disturbing activities of the speculators."<sup>14</sup> Gradually, the object of the fund was extended, and it was used to combat seasonal exchange fluctuations. The major purpose of other Exchange Funds was to establish and define appropriate exchange levels, *i.e.*, to resist general trends in the exchange rates.

In a general way, we can say that the main purposes of such Funds are: (i) to iron out short-term fluctuations in the rates of exchange, and (ii) to safeguard against the disturbing influences arising out of the movements of short-term funds and of speculative activities. Continually, fluctuating exchanges seriously hamper trade. The Fund is, therefore, meant to facilitate the smooth course of foreign trade.

By similar devices the dollar-sterling rate was maintained at £1 = 4.03 dollars during World War II.

### Other Exchange Control Devices

Strictly speaking, the term exchange control is applied to several devices most of which were first introduced in Germany during the Nazi regime. Later, other countries also adopted some of them.

Some of these devices we have already considered while discussing restrictions on international trade. Here we shall look at them again from the point of view of foreign exchange rather than of foreign trade. Such devices are: (a) Clearing Agreements, (b) Standstill Agreements, (c) Transfer Moratoria, and (d) Blocked Accounts.

Under a **clearing agreement** between two countries, importers in both countries pay into an account at their respective central banks the purchase price of the goods imported. This money is then used to pay off exporters. The rate between the currencies is usually fixed by the terms of agreement. The object is to regulate imports according to the wishes of the government, to ensure equilibrium in the balance of payments and to prevent uncertainties of fluctuating exchanges. The system tends to encourage bilateral trade at the expense of multilateral trade and thus has a restrictive effect on international trade. On the other hand, it discourages dumping and currency depreciation. On the whole, the system stands condemned except under special circumstances of a war or as a temporary measure to tide over a period of disequilibrium in a country's balance of payments until the basic causes of such a disequilibrium have been removed.

A **standstill agreement** is a device to prevent the movement of capital through a moratorium on outstanding short-term foreign debts of a country and to give her time to put her house in order. Either the short-term debt is converted into long-term debt or provision is made for its gradual repayment. This device was used in Germany after the crisis of 1931.

**Transfer moratoria** is another device of the same kind. Under this system, importers or others pay their foreign debts in their domestic currency to a specified authority. When the moratorium is concluded these funds are remitted abroad. A foreign creditor is sometimes allowed to use his funds in the country imposing the moratorium in a way specified by the government.

**Blocked accounts** spring from the previously considered two devices of standstill agreement and transfer moratoria. When foreign debts paid in domestic currency to the central bank cannot be remitted abroad without the permission of the government, blocked accounts are said to arise. Since idle funds in the country lead to contraction of credit, the foreign creditors are not altogether prevented from using them. But they have to be used in the manner prescribed by the government. Usually, they are allowed to be sold in the open market. In most cases, they are sold at a heavy discount.

13. League of Nations—*International Currency Experience*, 1944, p. 143.

14. *Ibid.*



The establishment of an International Monetary Fund was the outcome of a conference held at Bretton Woods, New Hampshire, in the summer of 1944. The main purposes for which the I.M.F. was set up were to provide exchange stability, temporary assistance to countries falling short of foreign exchange and international sponsoring of measures for curing fundamental causes of disequilibrium in balance of payments. The I.M.F. is a pool of central bank reserves and national currencies which are available to its members under certain conditions. It can be regarded as an extension of the central bank reserves of the member-countries.

#### PURPOSES AND OBJECTIVES

According to Article I of the Fund, the main purposes of the Fund are:—

- (1) To promote international monetary co-operation through a permanent institution.
- (2) To facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment of the member-countries.
- (3) To promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation.
- (4) To assist in the establishment of a multilateral system of payments in respect of current transaction between members and in the elimination of foreign exchange restrictions.
- (5) To give confidence to members by making the Fund's resources available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments

1. See the excellent article on "The International Monetary Fund" by Alvin Hansen in *America's Role in World Economy* reprinted by Hess and others in *Outside Readings in Economics*, pp. 752-64.

See also Halm, G.N.—*Monetary Theory*, Ch. XV.

without resorting to measures destructive of national or international prosperity (e.g., deflationary policies).

(6) In accordance with the above, to shorten the duration and lessen the degree of disequilibrium in the international balance of payments of members.

#### ORGANISATION AND FUNCTIONS

##### Organisation of the Fund

The International Monetary Fund (I.M.F.) was constituted by subscriptions from members agreeing to participate in the Fund amounting to 8.5 billion dollars out of which India's contribution was 400 million dollars. The subscription was to be partly in the form of gold and partly in domestic currency. A member-country is required to pay 25 per cent of its quota or 10 per cent of its holdings of gold, whichever is smaller, in the form of gold. The resources of the I.M.F. are thus partly gold and partly currencies of the member-countries, the latter being kept in the central banks of the countries concerned. Members' liability to pay a part of its quota in gold has been now (1976) abrogated under the New Articles.

In 1958, there was made a general increase of 50 per cent in members' quotas and a specially higher increase for Canada, Germany and Japan. In 1965 and in 1970, quotas were again raised by 25 per cent each time. India's quota, which was originally equal to \$400 million, was raised to \$600 million in 1958 and \$750 million in 1965 and subsequently to \$940 million.

A substantial increase in Fund quotas was made in 1979 from SDR 40 billion to SDR 60 billion and subsequently in February 1983 making a 47 per cent increase in member quotas raising the Fund's resources from about \$66,000 million to \$98,000 million.

It may, however, be added that the above increase in the Fund quotas has not meant a corresponding



increase in their borrowing facility. For instance, in 1979 when Fund quotas were raised, the ceiling on borrowing was reduced from 6 times a member's quota to 4.5 times. Thus India's ceiling rose only from SDR 7.2 billion to SDR 7.6 billion, though its quota had been increased by 50 per cent. Now when quotas were increased in 1983, the controlling group demanded that the ceiling on borrowing should be reduced from 4.5 times to 3 times the quota. The maximum that India could borrow would, in that case instead of rising, come down from SDR 7.6 billion to SDR 6.6 billion, but it might be allowed to retain its old ceiling of SDR 7.6 billion.

The Fund can purchase and sell currencies of member-countries for one another subject to the condition that the holding of no member-country's currency should exceed 200 per cent of its quota, raised later to 600 per cent but reduced in 1979 to 450 per cent. Thus, a debtor-country is saved from gold exports and consequent deflation (as happened under gold standard) through the help of the Fund.

The creditor-countries, whose export surplus exceeds 75 per cent of their quota, will have their currencies declared scarce. Such currencies are rationed among countries needing them. The I.M.F., however, can increase the supply of scarce currencies by borrowing them or by purchasing them against gold. If even then these currencies are not enough, debtor-countries must restrict their imports from credit-countries and thus achieve equilibrium in their balance of payments.

Thus, a member's quota has four-fold significance: It determines (a) a member's subscription to the Fund, (b) its access to Fund's resources through drawings from the Fund, (c) its relative voting power in the Fund management, and (d) its share of any allocation of SDRs among participants in the Special Drawing Account.

As regards the rates of exchange, member-countries are required to fix parities of their currencies with gold. But these parities need not be fixed for all time. An all-round uniform change in them can be brought about by the consent of the member-countries contributing individually more than 10 per cent of the aggregate quota. Apart from this, the member-countries can alter exchange value of their currencies by 10 per cent. Another 10 per cent change can be brought about with the consent of the Fund. Changes beyond this can be brought about with the consent of the Fund, only to correct fundamental disequilibria.

"Thus, exchange depreciation, which may be necessary for a country, whose money is overvalued, can be accomplished without inviting retaliation. In this way, the Fund not only provides temporary assistance in tiding a country over a period when it cannot acquire an adequate supply of foreign exchange; it also sponsors measures to remedy more fundamental difficulties. And by holding member-countries to their agreement not to

engage in competitive exchange depreciation, it introduces a measure of disarmament into the field of international economic relations."

The Fund does not interfere in the internal economy of member-countries in order to restore equilibrium in their balance of payments. The members can withdraw from the Fund by a simple notice in writing.

The IMF is managed by an Executive Board of 20 directors—5 assigned to the largest quota holders (U.S.A., U.K., West Germany, France and Japan), 3 elected by the South African countries, 3 by Latin American countries, 5 by Far East Pacific countries and 4 by Continental Europe.

This is a system analogous to exchange stabilization account evolved by individual countries during the depression years of the 'thirties. The same principles have been carried to the international plane. It seeks to achieve the purpose of international gold standard without its shortcomings.

#### Functions of the Fund

From the brief account of the International Monetary Fund given above, it can be seen that the Fund performs five major functions:

(i) **It serves as a short-term credit institution.** If any country is in a temporary difficulty in liquidating an adverse balance of payments, the Fund will come to its aid. It does not, however, undertake to supply all the foreign exchange that a country may need. All countries are supposed to have their separate monetary and foreign exchange reserves to meet their normal requirements. The Fund is not intended to supplant them but to provide only a second line of defence in case of emergency. The borrowing country has to pay interest and maintain its quota intact. Should a country borrow unnecessarily, the rate of interest rises as the amount of loan increases. Lower rates are charged if a loan is taken for a short period. If the amount of the loan and its duration are such as to raise the rate of interest to 5 per cent, the Fund can then raise the rate to any level by way of penalty, for this is regarded as an abuse of the privilege of membership.

Thus, it is clear that the credit operations of the Fund are not only conducted on sound business principles but they also ensure that the object of the Fund, *viz.*, to provide short-term loan only, is not defeated.

(ii) **The Fund provides a mechanism for improving short-term balance of payments position.** For this purpose, its rules provide for orderly adjustment of exchange. No member-country can indulge in irresponsible and competitive exchange depreciation thus introducing the law of the jungle in international monetary relations. Whenever a country feels that its rate of exchange is out of line with its economy, the rate can be altered but only after due deliberation between the country and the authorities

2. Tarshis, L.—*The Elements of Economics*, 1946, p. 619.



of the Fund. There is thus provision for the careful determination of the initial rate and its orderly adjustment subsequently. This procedure at once reconciles the claims to internal stability and full employment on the one hand and to international stability and high level of world trade on the other. Every country must now rely on its own productive efficiency rather than on artificial stimulus of exchange depreciation to hold its own in the world markets.

(iii) **The Fund provides machinery for international consultations.** It brings together representatives of the principal countries of the world and affords an excellent opportunity for reconciling their conflicting claims. This constructive approach and the measure of international co-operation have had not only a stabilising influence on world economy but they have also led to the expansion and balanced development of world trade and world production. The Fund has thus contributed to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of the member-countries. For this purpose, the Fund is engaged in constant study and research relating to the important and urgent economic problems of the world.

(iv) It provides a reservoir of the currencies of the member-countries and enables members to borrow one another's currency.

(v) It promotes orderly adjustment of exchange-rates to promote exchange stability.

### I.M.F.: AN IMPROVEMENT ON GOLD STANDARD

There is no doubt that the I.M.F. is a vast improvement on the gold standard. To maintain a gold standard was a very costly affair and it was also unnecessary. What matters is that a currency system retained the confidence of the people and should provide stability of its internal and external value.

There should be no crisis of confidence. Under gold standard, the currency system depended on the volume of gold output or the acquisition of gold. A scramble for the yellow metal led to its maldistribution and the breakdown of the gold standard. Under intense economic nationalism, it became almost impossible to make the countries to observe the Rules of the Gold Standard.

The I.M.F. has all the merits of gold standard minus its demerits. It ensures exchange stability without a country having to undergo the expense of maintaining a costly currency system. The exchange parities are fixed in terms of gold but it is unnecessary to keep large gold reserves for currency purposes. The I.M.F. provides multilateralism because it encourages multilateral transactions. Under the gold standard, a country having a net deficit in the balance of payments had to export gold to meet this deficit. But under the I.M.F., this function of gold is performed by the I.M.F. quota. Under the gold

standard, there were no trade restrictions. The I.M.F. also seeks to restore multilateral trade on the basis of freely convertible currencies and reasonably stable exchanges.

Under the gold standard, excess of imports were met by the export of gold which resulted in contraction of credit. This was a serious defect of the gold standard. Under the I.M.F., a country is enabled to meet an adverse balance by the help of the Fund without unfavourable effects on its credit structure which a deflationary policy must produce.

Another serious defect of the gold standard (which is avoided by the I.M.F.) was that exchange stability was made the first objective of the monetary policy and it was maintained by deflation of credit in the country losing gold. The country receiving gold was expected to expand credit. This method of maintaining equilibrium in balance of payments worked successfully only so long as wages and other costs were flexible. But now these costs have become more and more rigid due to trade union pressures. In these circumstances, deflation paralyses economic activity. The I.M.F. avoids these rigidities. There is provision for change of rates of exchange, if circumstances warrant.

**Conclusion.** In short, the I.M.F. combines the advantages of gold standard with those of free exchanges and avoids its disadvantages by preventing competitive exchange depreciation, prohibiting exchange restrictions in a normal situation, by facilitating convertibility of currencies and by providing a convenient and adequate currency reserve for the use of the member countries.

### WORKING AND EVALUATION OF THE FUND

It is clear that the Fund can play a vital role in achieving international economic stability and in promoting healthy international monetary relations. However, the I.M.F. failed to achieve its objectives in the early years of its operations.

(i) For many years, the Fund was not able to achieve its fundamental objective of pulling down trade barriers. Agricultural protection dominates fiscal policies in Europe and the U.S.A. It is a pity that the U.S.A. still clings to the protectionist policy in spite of her tremendous competitive strength. These policies are repugnant to the underlying objectives of the Fund. Lack of international co-ordination of monetary, import and stockpiling policies has aggravated the difficulties.

(ii) The Fund is helpless in restraining inflationary pressures in a country and in maintaining monetary stability. The seventh report of the Fund emphasized internal monetary stability as the primary need, and it issued a warning to the member-countries to end inflation or the world will move further towards restrictions on trade and



currency convertibility. But the warning went unheeded.

(iii) The I.M.F. was unable to promote exchange stability in the member-countries. Perhaps the post-war dislocation proved a little too much for the I.M.F. In 1948, France carried 44.4 per cent devaluation and established a free market in gold and U.S. dollars in Paris which was incompatible with the principles of the Fund. But still the Fund treated France in distress with sympathy and enhanced its reputation for its principles, and for its management. Up to September, 1949, there was no general devaluation; but Great Britain devalued her pound at that time by 30.5 per cent and the British example was followed not only by the Commonwealth nations (except Pakistan) but also by 13 other countries. India devalued her currency by 36.5 per cent in June, 1966 and England again devalued the £ in November, 1967 by 14.3 per cent. The Fund could object to this big change in the par value of the currencies involved, but did not. It felt that the action was necessary to correct a fundamental disequilibrium. The change, though not agreeable, was inescapable.

(iv) The Fund was unable to prevent dollar shortage in the late forties. It should have declared dollar as a scarce currency and adopted measures to make the dollar freely available. But it did nothing of the kind.

(v) The Fund has suffered all along from inadequacy of funds. Funds of the I.M.F. may not be sufficient to cope with the sudden movements of hot money when there are no exchange controls to stop them. Then there are national sovereignties to be reckoned with. "The I.M.F. agreement is a transparent piece of paper stretched across the cracks which exist in the world polity of every national character."

An apt picture of the working of the Fund is given by Coulborn: "There are fifty (1952) countries trying to play the semi-gold standard game, whereas there used to be six principal players and few lesser ones. Yet it is the same game (because I.M.F. is essentially an amalgamation of the Exchange Equalisation Accounts of gold standard days put under international control), and the chief players are the same, as the voting strengths show. It remains to be seen whether it is a better game played somewhat publicly in Washington, with fairly precise rules codified for it and a large number of amateur players taking a small part, or whether it was better when six stars played with skill and without distraction, making the rules as they went along. It may be a reasonable guess that the best game of all will prove to be a combination of the present form with the earlier one. There might be added both strength and flexibility to the I.M.F. system if the Exchange Equalisation Accounts, provided anew with

resources in some cases, came into the exchange market again in the more important financial centres."

Gradually, however, the Fund improved its performance. The annual report of the Fund presented at its annual meeting held in October 1958 in New Delhi said that considerable headway had been made towards the achievement of its objectives. To an increasing extent, the world had been moving towards exchange stability with orderly exchange arrangements, among the Fund's members, the avoidance of competitive depreciation, the elimination of exchange restrictions and establishment of a multilateral system of payments. The Managing Director of the Fund declared at the opening of the annual conference in September 1962 that there were indications that the world was approaching a state of economic equilibrium solid enough to withstand monetary tension. The improvement has continued since then.

A plan for a new international asset, known as the 'special drawing rights', was approved by the I.M.F.'s Board of Governors in September, 1967. It is like a normal account in a bank except that no deposits are required to build up the account. Once the allocation is made, a participating country automatically receives a share corresponding to its quota in the I.M.F.'s general account. They are treated as part of the monetary reserves to finance their international trade. The special drawing rights supplement the gold, the dollars and pounds sterling most countries now use as money reserves.

In order to mitigate the hardship of the developing countries arising from the unprecedented oil price hike, the I.M.F. set up a three-billion "Oil facility" fund in 1974 in the form of special drawing rights. The developing countries get a credit out of this fund at a low rate of interest (2.5 per cent) to enable them to pay their enhanced oil bills and meet balance of payments difficulties caused thereby. It was decided to keep the "oil window" open for another year and to raise the oil facility fund from \$3 billion to \$6 billion. Interest is subsidized from a fund contributed by oil exporting and industrial countries. The Oil Facility was wound up in 1976.

Another facility provided by the Fund to its members is the **Compensatory Financing Facility** Established in February 1963, it is designed to extend the Fund's balance of payments short-term support to such member countries—particularly primary producing countries as suffer from fluctuations in their export receipts due to circumstances beyond their control. Except in the case of natural disasters or other major emergencies, the drawings under this facility cannot exceed in any one year,



more than 50% (previously 25%) of the member's quota and the total drawings more than 75% (previously 50%) of the quota. Drawings under the compensatory financing facility are additional to those under the Fund's regular tranche policies.

Mention may also be made of the **Extended Facility** which was established by the Fund in October, 1974. The object of this facility is to provide medium-term assistance for member countries that need to make structural adjustments to correct balance of payments difficulties. This facility represents an important development in Fund practice. While the usual duration of a **stand-by agreement** is not more than one year, the extended arrangement provides an assurance of Fund support for a period up to three years, as well as providing larger amounts and on longer re-purchases terms than are available under the Fund's other facilities. This facility is designed to benefit largely the developing countries.

It was also agreed on August 31, 1975 to establish a **Trust Fund** out of the profits derived from the sale of the Fund's gold. This fund is used to provide balance of payments assistance on concessionary terms to members with low per capita income, initially those with 1973 per capita income not exceeding SDR 300. It was estimated that the trust fund could provide assistance between \$ 400 million and \$ 500 million a year.

We may summarise the achievements and shortcomings of the IMF thus:—

The following table gives a summary of the transactions of the IMF for 1978-1982

TABLE  
SUMMARY OF TRANSACTIONS, 1978-82  
(In millions of SDRs)

|  | Calendar YEAR  |                |                |                | January-March  |                |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
|  | 1978           | 1979           | 1980           | 1981           | 1981           | 1982           |
| <b>Total purchases</b>                       | <b>3,744.3</b> | <b>1,842.8</b> | <b>3,752.7</b> | <b>7,081.7</b> | <b>1,505.7</b> | <b>1,826.2</b> |
| Reserve tranche                              | 2,535.5        | 147.1          | 359.2          | 310.4          | 202.9          | 592.4          |
| Credit tranche                               | 421.0          | 853.1          | 1,798.6        | 3,436.6        | 1,117.3        | 419.8          |
| (Of which, supplementary financing facility) |                | 205.4          | (943.1)        | (1,468.9)      | (342.6)        | (300.7)        |
| (Of which, enlarged access)                  | (-)            | (-)            | (-)            | (305.5)        | (-)            | (10.0)         |
| Compensatory financing                       | 577.7          | 572.0          | 980.4          | 1,242.5        | 19.4           | 309.9          |
| Extended facility                            | 174.0          | 233.0          | 614.5          | 2,092.2        | 166.1          | 504.1          |
| (Of which, supplementary financing facility) | (-)            | (101.5)        | (275.2)        | (570.7)        | (51.0)         | (108.8)        |
| (Of which, enlarged access)                  | (-)            | (-)            | (-)            | (480.6)        | (-)            | (150.0)        |
| Buffer stock                                 | 36.1           | 37.7           | —              | —              | —              | —              |
| <b>Total repurchases</b>                     | <b>4,845</b>   | <b>4,215.3</b> | <b>3,344.8</b> | <b>2,109.8</b> | <b>592.4</b>   | <b>528.2</b>   |
| Trust Fund loans                             | 688.1          | 526.6          | 1,256.0        | 367.7          | 367.7          | —              |

SOURCE: *Finance and Development*, June 1982, p.3

### Achievements

(i) The IMF has provided an excellent forum for the discussion and solution of the economic, fiscal and financial problems having an international aspect.

(ii) It has promoted the expansion of international trade in a variety of ways to the mutual benefit of the member countries.

(iii) It has promoted exchange stability while at the same providing for an orderly adjustment of exchange rates.

(iv) It has simplified to some extent the multiple exchange system.

(v) The Fund has been instrumental in promoting steady progress towards the establishment of a multilateral system of payments in respect of current transactions.

(vi) It has liberalised the use of its resources by members in a number of ways.

(vii) By promoting economic stability of the member countries, it has accelerated the pace of economic development of the under-developed countries.

(viii) The Fund has shown great interest in the economic growth of less-developed countries.

### Shortcomings

(i) The Fund was unable to tackle the immediate post-war economic problems affecting its members.

(ii) The insistence on devaluation in some cases as a cure of disequilibrium in balance of payments was not well-advised.



(iii) The Fund followed a passive and weak-kneed policy in the fixation of exchange rates both initially and subsequently.

(iv) In spite of persistent shortage of dollars, it did not declare it as a 'scarce currency' and take steps to ensure its ready availability.

(v) It is said to have granted undue credit to certain countries without making sure of their credit-worthiness.

(vi) The Fund has been charged as being partial to the developed countries and not helping adequately the developing countries.

(vii) The domination of American administration over the Funds' operations has laid it open to severe criticism by other member countries.

**Conclusion.** In spite of the shortcomings pointed out above, it must be conceded that the Fund has been a striking success. Considering the growth of the Fund in size, composition and resources and the important role it has played in solving international monetary problems and in formulating international monetary policies, the Fund must be pronounced a great success. There is no doubt that the Fund has remarkably succeeded in the achievement of its main objectives, *viz.*, expansion of international trade, elimination of restrictive practices, stabilising exchange rates and ensuring easy convertibility of currencies. In its operations, it has shown imagination and dynamism.

### I.M.F. and Less Developed Countries

From the point of view of the L.D.C.'s (less developed countries), the working of the I.M.F. has not been satisfactory. It did not pay sufficient attention to the problems of the L.D.C.'s. It was supposed that the domestic economic considerations of the L.D.C.'s and the world objectives of international co-operation were not really incompatible, but even mutually reinforcing. That is, the expansion of world trade depended virtually on the monetary stability of the developed countries and that economic development and full employment in the L.D.C.'s would automatically follow. It was not realised that, in economic theory as well as in practice, considerations of full employment and economic development in L.D.C.'s require policies which would usually run counter to the principles of international economic co-operation, free trade and exchange stability.

Thus, a major drawback of the Fund's rules, in principle as well as in practice, has been the asymmetry of its adjustment mechanism as between the high reserve countries and low reserve countries, that is, the well-developed and the developing countries. The Fund expects normal adjustment of the balance of payments through changes in domestic expenditure and change in the exchange rate is to be made as a last resort, when the Fund is convinced that there is a fundamental disequilibrium. This adjustment is very easy for the rich countries

because, they have huge stocks of international reserve and abundant provision of international liquidity. They were able, therefore, to avoid going through painful process of adjustment by domestic measures. The L.D.C.'s, on the other hand, had to curtail their domestic investments and slow down their development programmes to adjust their exchange rates. Mr. Pierre-Paul Schweitzer, the Managing Director of the Fund, in his address in April, 1973 observed, "a system in which the burden of adjustment is not equitably shared between surplus and deficit countries, produces strains and frictions which may be political as well as economic."

The funds of the I.M.F. have been largely flowing to the rich countries. The use of the Fund resources by L.D.C.'s during 1966-72 fell to 25% of the total world use. In the sixties, however, the attitude of the Fund improved under the leadership of Mr. Schweitzer. The Fund set up its compensatory finance in order to give assistance to primary producing countries experiencing temporary shortfalls in their export earnings. In 1964, the Fund introduced a facility to finance buffer stocks. The annual reports of the Fund are now more sympathetic to the requirements of the L.D.C.'s.

It may be mentioned that an over-whelming majority of the members of the Fund are developing countries and should be able to take care of their special needs. The compensatory financing facility for example, is specially designed to benefit them. Mr. Witteveen, the Managing Director of the Fund, estimated that the value to the developing countries of the trust fund, increased access to Fund's resources and the recent liberalisation of the Fund's compensatory financing facility could be of the order of 3 billion a year, in addition to the normal use of the Fund's credit facilities.

It may also be pointed out that it is not the function of the IMF to transfer real resources for development (that is the function of the World Bank). The proper function of the Fund is to supervise the international monetary system and to give members **temporary** assistance to overcome their balance of payments problems. That is why the Fund has always emphasised three aspects of its policies regarding the use of its resources: (a) non-discrimination among its members, (b) the temporary nature of use of its resources, and (c) its conditionality.

### PROBLEM OF INTERNATIONAL LIQUIDITY AND S.D.R.'s

International liquidity means the resources or the reserves at the disposal of the various countries of the world for settling trade and other imbalances in the international sphere. It is common knowledge that a country's international transactions on current account are rarely in balance, *i.e.*, the total value of exports of goods and services and the total value of imports of goods and services are seldom equal.



### Components of International Liquidity

Under the present international monetary system, which underwent a severe crisis in recent years, the total liquidity or reserves at the disposal of a country consists of (a) the gold reserves of the national monetary authorities with the central bank, (b) holdings of the key currencies acceptable internationally, *i.e.*, the U.S. dollar and the U.K. pound sterling, and (c) I.M.F. reserve position which represents the drawing potential of the I.M.F. countries. Out of these three components of international liquidity, the holdings of gold and dollar are more important in determining the extent of liquidity. It means that the supply of international liquidity is linked with the supply of gold, and the dollar which in turn is a function of the external balance, *i.e.*, the balance of payments position of the U.S.A. vis-a-vis the rest of the world.

It has been argued by many economists that in the present times, the amount of international liquidity at the disposal of the countries of the world especially of developing countries is quite inadequate.

### Causes of Inadequacy

The main reasons advanced for the inadequacy of liquidity are as follows:

(i) While, on the one hand, total gold reserves have grown since 1950 at 1.4 per cent per year, and total international liquidity at 2.7 per cent per year, on the other hand, the world trade has since 1950 grown at the annual rate of 7.5 per cent per year. In other words, the supply of liquidity has not been keeping pace with the demand for liquidity. The world trade is expected to grow in the future at 6 per cent to 7 per cent annually; therefore, the total reserves should also grow at least by this rate.

(ii) Distribution of liquidity among the various countries of the world is also very uneven. Some countries have too much liquidity, whereas others have too little. For example in 1968, the E.E.C. countries and Switzerland held over 40 per cent of the total gold stock in the world. The U.S.A. and these countries between them still had more than 75 per cent of the gold stock.

(iii) The supply of gold—one of the major components of liquidity—is very much limited and also cannot be increased according to the needs. For example, during the period 1958–68, gold has not practically contributed to the growth of international liquidity. The total stock of world gold, which was 38.0 billion of U.S. dollars in 1958, increased to 38.9 billion of U.S. dollars in 1968. Therefore, the growing need of international reserves could be met by increasing the supply of the key currency, *i.e.*, dollars. But the supply of the U.S. dollar is ultimately linked with her gold stock and her external position. In the present times, however, the chances of increasing the supply of dollars are very limited.

As long as there is confidence in the key currency, it will be acceptable internationally and will, therefore, serve as an international medium of exchange. But this confidence in dollar was shaken. The ability of the U.S.A. freely to convert these dollars into gold was called into question. On August 15, 1971, the U.S.A., announced that it was no longer prepared to buy and sell gold freely which undermined the present system considerably. Now under the present system, supply of dollar, hence liquidity, can be increased only if the U.S.A. is willing to have more and more deficits in her balance of payments which seems to be next to impossible under the present circumstances.

### Special Drawing Rights or 'Paper Gold'

In order to solve the problem of liquidity, in July 1969, the Group of Ten agreed to establish Special Drawing Rights (S.D.R.'s). Under the scheme, the I.M.F. is empowered to grant special drawing rights (S.D.R.'s) on a specified basis. When a member country has been sanctioned S.D.R.'s, it is entitled to obtain defined equivalent of currency from other participating members to meet its liabilities. The essence of this plan is that they create a new international reserve asset. They can be used unconditionally by the participating countries and they are not backed by gold. The new reserves are designed to supplement the gold and the reserve currencies, *i.e.*, the pound sterling and the dollar. They are meant for use by the central banks of the Fund's member countries; they are not to be made available for commercial use for payments in the ordinary course of business. With the help of the S.D.R.'s the central banks can buy whatever currencies they need for settling balance of payments. The creation of S.D.R.'s is essentially similar to credit creation by central banks to supplement the resources of the banking system.

Three features of the S.D.R.'s deserve notice: Firstly, they constitute a permanent part of the reserves of each country. Secondly, a country is free to decide as to how and when to use its S.D.R.'s. Thirdly, the scheme implies that each country will be prepared to take S.D.R.'s and supply its own currency. Since the value of S.D.R.'s is fixed in gold it is called 'paper gold' (=0.88671 grams of fine gold).

The S.D.R. facility departs from ordinary I.M.F. procedures in a couple of ways: First, The attractiveness of the S.D.R. as a reserve asset derives from the obligation of all members to accept them. If a deficit country, say France, finds itself in need of convertible foreign currencies, it can acquire say German marks or any other currency in exchange for the S.D.R.'s. The purchase is directly made from Germany and does not affect any of the I.M.F.'s holdings of the currencies involved. S.D.R. transactions are outside the regular Fund operations, and



the role of I.M.F. is only that of an intermediary and a guarantor. The transaction will deplete France's holdings of S.D.R. and will increase that of Germany. The French are not required to meet any fixed repayments schedule as under normal I.M.F. quota operations. Secondly, the scheme recognises the fact that international reserves can be created without the need for assets to back the new international liabilities. The use of any money depends ultimately on its acceptability in settlements. This fact has been used in connection with the special drawing rights. The resources of the new scheme are not a pool of currencies. It is simply the obligation of the participating members to accept the special drawing rights for settlement of payments between the member countries. Thirdly, countries now have immediate access to 25 per cent of their basic quota in the Fund but that increasingly stringent conditions of approval are needed if a country wishes to use more than 25 per cent. But S.D.R.'s have an automaticity that will lead to international liquidity being automatically increased when needed.

On January 2, 1970, the I.M.F. announced the first allocations of \$3,414 million worth of S.D.R.'s to 104 countries. Each country's allocation was made at 16.8 per cent of its quota as in December last and India was allocated \$126 million (Rs. 94.5 crores). On January 1, 1971 and January 1, 1972, the next two allocations of nearly \$3,000 million each were made.

On January 1981, the Fund allocated a total of SDRs 4.05 billion to the member countries on the basis of 6.8 per cent of their quota. The total of SDRs allocated till then amounted to nearly SDRs 21 billion. The SDR basket then was composed of the currencies of five countries with largest export of goods and services viz. the U.S.A., West Germany, France, Japan and the U.K.

The IMF announced on August 30, 1979 that it had distributed \$ 396 million to 104 countries from profits made out of the sale of gold. India was the biggest beneficiary receiving nearly 46 million ( \$ 119.38 million in January 1979). The distribution was made in proportion to each country's quota. Two previous distributions had totalled \$ 363 million.

Benefit of the scheme to India as also to other developing countries is indirect. By increasing international liquidity, the scheme provides a more assured flow of multilateral foreign aid and more liberal trade and aid policies by the richer countries. Increase in world trade facilitated by the S.D.R.'s may be regarded as a factor in boosting India's exports. A highly comfortable foreign exchange reserve position enabled India to pay off 260 million S.D.R.'s to the Fund in September, 1976.

**Comments.** Although S.D.R.s represent an important advance, they may also create a problem. S.D.R.s will now serve as reserves alongside the two

existing reserve assets, *i.e.*, gold and dollar. Presumably the stock of S.D.R.'s will grow much faster than that of the other assets. There is no doubt that the stock of gold is more or less fixed. But an international multiple-reserve assets system cannot work well unless the different reserve assets are equally attractive. Otherwise central bankers may hoard a preferred asset and use a less attractive one in international settlements, the operation of a sort of Gresham's law. In contrast to the traditional value attached to gold and the linkage of the dollar to the strongest economy in the world, the attractiveness of S.D.R.s depends solely on an agreement by all participating countries to accept them. At least at the outset they may be considered less attractive than the other two assets.

Besides, as Dr. Brahmanand has observed, "the S.D.R. instead of being a panacea may aggravate the financial disequilibrium in the world." This is because of the fact that the distribution of S.D.R.s on the basis of the I.M.F. quota, does not satisfy the canon of equity and justice. The developed countries which are already having enough of liquidity, have been allotted a major share of the total S.D.R.s. The problem, therefore, of creating more liquidity for the developing countries remains partially unsolved.

Further, the rate of interest on S.D.R.s is very low, *i.e.*, 1.5 per cent per annum. It is possible that the deficit countries may start using S.D.R.s intensively for covering up their deficits as compared to the other assets, because of low rate of interest. On the other hand, the developed countries may not much like to accumulate more and more S.D.R.s. This might create a situation involving lack of adjustment as among the developed and developing countries of the world in implementing this scheme successfully in the long run.

**Conclusion.** It will, however, be admitted that the system of S.D.R.s represents a bold attempt to tackle the serious problem of international liquidity. It is to be hoped that as the scheme is worked, its inadequacies and shortcomings will be sought to be removed so as to make it a success.

## REFORM OF THE INTERNATIONAL MONETARY SYSTEM

### Breakdown of the Brettonwoods System

A nicely and diligently built up system of exchange stability by the I.M.F. seemed to have collapsed like a house of cards. This was brought about by the dollar crisis created by the adverse American balance of payments which reached a record-breaking and back-breaking figure of 11,300 billion in the first half of 1971. A package of measures announced by President Nixon delinked dollar from gold and the exchange rates started floating all round. A firm dollar-gold link and stable exchange rates had been the cornerstones of the



monetary system created by the Brettonwoods Conference. The Nixon announcement knocked the very foundation of the I.M.F. and the system of fixed exchange rates disintegrated. The I.M.F. pathetically accepted the Smithsonian agreement on the realigned exchange rates. But the Fund report for 1973 did not give any indication that the realigned rates were expected to stabilise. In fact, the report explicitly stated that the prevailing currency relationship lacked firm foundations of an internationally agreed set rules or code of conduct.

The Fund's collapse was due to its emphasis on "over-convertibility," *i.e.*, the extension of convertibility to short-term capital movements beyond the Fund's normal expectations. The removal of restrictions on "hot money flows" and maintaining at the same time the Fund system of stable exchange rates really spelt the doom of the Fund. The American dollar could not bear the strain of these hot flows. The seasaw movements of exchange were caused by the uncertain movements of speculative capital. The speculators shifted large volume of funds with great rapidity making mockery of attempts to manage balance of payments.

**Abolition of Gold Basis of I.M.F. on January 16, 1975.** On January 16, 1975, the International Monetary Fund (I.M.F.) agreed to abolish the official price of gold. This put an end to the privileged role that gold had played in the international monetary system for the past 30 years. This decision opened the way to the elimination of any reference to gold in the I.M.F. statutes and it amounted to a new step towards the release of gold stocks held by central banks. The I.M.F. members agreed to lift the obligation to pay one-fourth of their I.M.F. quotas in gold.

**Reforms.** The first stage of the reform of the international monetary system began when the Governors of the International Monetary Fund took a decision to this effect in their Annual Meeting held in 1971 in Washington. It reached a final stage when the Interim Committee of the Board of Governors in their meeting held in Kingston, Jamaica on 7-8 January 1976 reached an agreement on an important package of reforms relating to IMF. This most comprehensive package of monetary reforms, since the establishment of the Fund, was approved by Board of Governors at the end of April 1976. These reforms are in the form of a proposed amendment to the Articles of Agreement of the Fund. They are subject to the approval of the three-fifths of member countries representing four-fifths of the total voting power. This formality may take a year or so. Besides amendment to the Fund's Articles of Agreement, the reforms include a substantial quota increase for almost all members, as well as increase in access to the Fund's resources, the establishment of a trust fund for developing countries financed through the sale of a portion of Fund's gold, the sale

of another portion of the gold to all members in proportion to quotas at the official price.

Below we give a short summary of the main features of the reforms of the IMF:—

**Exchange Rates.** The amended Articles give the member countries a freedom of choice of exchange rates which means that, in effect, the amendment legalises the present system of floating exchange rates; it ends the existing system of par values based on gold; it imposes on members an obligation to collaborate with the Fund and with each other to promote better surveillance of international liquidity. By decisions taken by 85% majority of the total voting power, the Fund will be able to recommend exchange arrangements that accord with the development of the international monetary system, or to determine what conditions permit the introduction of a system based on stable but adjustable par values. But any such arrangements will respect the right of members to maintain exchange arrangements of their choice. Thus, the new arrangements give the members "freedom of choice of exchange arrangements but not freedom of behaviour".

**Role of Gold.** The amended articles provide a gradual reduction in the role of gold in the international monetary system thus:

(a) elimination of the function of gold as the common denominator of par values and as the unit of value of the special drawing rights;

(b) the abolition of the official price of gold;

(c) the abrogation of obligatory payments in gold by members to the Fund and by the Fund to the members, and elimination of the authority for the Fund to accept gold except under decisions taken with a high majority of the total voting power;

(d) The Fund is to complete the disposition of 50 million ounces of gold;

(e) the authorisation of the Fund to dispose of the remainder of its gold holdings in various ways by sale at market prices or official price;

(f) "profits" on the sale of gold to be placed in a special account for use in the ordinary operations or for other uses, including those for the special benefit of members with low per capita income;

(g) the Fund is to avoid the management of the price, or the establishment of a fixed price, in the gold market; and

(h) the members to collaborate with the Fund and with other members in order to promote better surveillance of international liquidity and making SDR's the principal reserve asset in the international monetary system.

**S.D.R.'s.** There are changes in the characteristics and expansion of the possible uses of the S.D.R.'s so as to assist it to become the principal reserve asset of the international monetary system. Some of these changes are given below:



(i) Permission to enter into transactions without the necessity of the decisions by the Fund;

(ii) the Fund may authorise operations where otherwise not provided by the Articles subject to appropriate safeguards,

(iii) the Fund may review the rules for the reconstitution of participants, holdings at any time and may adopt, modify, or abrogate the rules by a lower majority of the total voting power than is necessary at present, (70% instead of 85%);

(iv) expansion of the possible uses of the S.D.R.'s in operations and transactions conducted through the General Department of the Fund; and

(v) the Fund may broaden the categories of other holders of S.D.R.'s, although not beyond official entities, and the operations and transactions in which they may engage.

**Financial Operations.** There is in the new Articles simplification and expansion of the types of the Fund's operations and transactions, particularly those conducted through the General Department. Certain policies and practices, which have been found useful, have been incorporated. For instance, Fund's policy on repurchase, which is designed to ensure that the use of the general resources will not extend beyond three to five years. Provisions have also been adopted to ensure that the Fund's holdings of the currencies of the members will be usable by the Fund in its operations and transactions. Similarly, the members will be able to obtain the currencies of other members. Members will be permitted to engage in transactions under special policies without at the same time foregoing their reserve tranche positions.

**Council.** The amended Articles give the Fund's Governors the authority to decide, by 85% majority of the total voting power, to call into being a new organ, the Council, composed of Governors, Finance Ministers, or persons of comparable rank. The Council will have decision-making powers. Its authority would extend to matters concerning adjustment process and global liquidity and the review, in this connection, of developments in the transfer of real resources to developing countries.

**Organisational Improvements.** The new Articles seek to make certain improvements in Organisational aspects of the Fund. The provisions governing the election of Executive Directors have been updated by the incorporation of the present number of elective Executive Directors. The number of the Executive Directors can be modified by a high majority of the total voting power. Other improvements relate to the classification and simplification of the distribution and delegability of powers among the organs of the Fund and reduction of special majorities to 70% and 85%. Some changes have also been made in the nomenclature in use in the Fund. These changes, however, do not involve changes of substance in the legal or operational organisation of the Fund.

## Second Amendment

Under the Second Amendment of the Fund's Articles adopted in March 1978, wide powers were given to the Fund over exchange rate practices, to abolish the official price of gold and to increase use of the I.M.F.'s Special Drawing Rights. The members can now buy and sell gold among themselves at market prices.

The amendment also provides for the setting up of a new council which will have decision-making power unlike the existing committee which could act only as an advisory body.

The Second Amendment to the Articles of Agreement of the IMF came into force on April 1, 1978. The amended Articles have abolished the System of fixed par values determined in terms of gold and the new exchange rate provisions give the members wide latitude in the choice of exchange rate practices best suited to their needs. Each member, however, undertakes a general obligation to direct its policies towards orderly growth with reasonable price stability and a specific obligation to avoid manipulation of exchange rates to prevent balance of payments adjustment or gain unfair competitive advantage.

The new system assigns to the IMF the responsibility for conducting a continuing surveillance over the operation of the international monetary system and the members' compliance with their obligations regarding exchange rate policies and in the operations of the balance of payments adjustment process. The amended articles also authorise the Board of Governors to establish a permanent machinery for exercising general supervision over the international monetary system, including the continuing operation of the adjustment process and development in global liquidity.

Efforts are being made now (since the abolition of the role of gold) to make SDR as the principal reserve asset. Ways and means are being explored to broaden the general acceptance of SDRs among members and non-members by enlarging their characteristics and uses.

## Supplementary Financing Facility (SFF)

The Supplementary Financing Facility (SFF) was established by the IMF in August 1977 with the object of extending financial assistance to those member countries which were expected to face large payments imbalances in relation to their economies and their quotas in the Fund.

## Compensatory Financing Facility

Under the Compensatory Financing Facility introduced since February 1963, the IMF provides financial assistance to members particularly primary exporting countries experiencing balance of pay-



ments pressures arising from fluctuations in their export earnings.

### Trust Fund

The Trust was established by the IMF in May 1976. The object was to provide additional balance of payments assistance on concessional terms to eligible developing countries during two periods: first ending with June 30, 1978 and the second period on June 30, 1980. The resources of the Trust Fund comprise mainly the profit from the sale of a portion of the Fund's own gold and income from investments of funds held by the Trust.

### Subsidy Account

A Subsidy Account was established by the IMF in August 1975 to assist member countries most seriously affected by oil price hike. It is designed to provide subsidy to such members in meeting the cost of using the resources made available to them through the 1975 Oil Facility. Contributions to the Subsidy Account were expected from 24 members including oil exporting and industrial countries.

### Substitution Account

A Substitution Account administered by the IMF would accept deposits of US dollars in exchange for equivalent amounts of special drawing rights (SDRs). This Account is a device to change the asset composition of official reserves by converting surplus money into assets priced in special drawing rights (SDRs). This would allow the member countries to exchange some of their unwanted dollar balances for funds denominated in SDRs. The countries holding these dollar reserves are put to great loss when dollar depreciates which is a very common phenomenon. This loss can be avoided if the excess dollars are transferred to another account in SDR denominations. This is the Substitution Account.

### Buffer Stock Financing Facility

This is a recent facility provided to the members in order to help them overcome serious balance of payments difficulties. Financial aid is given for creating and maintaining buffer stocks of essential commodities in danger of falling short.

### Common Fund

In June 1980, it was decided to establish a Common Fund to promote the stabilisation of commodity prices under international agreements. The Fund assured to extend its fullest cooperation in the working of the Common Fund.

In February 1983, the Interim Committee of the IMF decided to raise the quota resources by 47 per cent (40 per cent equiproportional and 60 per cent on other considerations, raising the Fund's own resources from about \$ 66,000 million to \$ 98,000 million. India's quota was expected to go up from

SDRs 1,717 million to SDRs 2,207 million, but its relative position down from 2.8 to 2.45 per cent.

### SDRs Allocation

As on January 1, 1981, the IMF allocated 4,052.5 million SDRs to its 141 member countries. This was the third and final allocation of 4000 SDRs each was made in 1979 and 1980. The total allocations stood at 21,433.35 SDRs. As a result of this allocation India got 116,790,000 SDRs which lent much-needed strength to India's dwindling foreign exchange reserves.

### A Serious Problem

The problem of all problems that has dominated the working of the Fund during recent years is the mounting deficits of non-oil developing countries arising out of four-fold oil price hike and inflationary prices they have to pay for the manufactures of the developed countries. On the one hand, the current account surpluses of the oil exporting countries, which had receded to \$5 billion in 1978, rose to \$68 billion in 1979 and was projected to reach \$115 billion in 1980. On the other hand, the deficit of the non-oil developing countries on current account rose from \$36 billion in 1978 to \$68 billion in 1979 and \$78 billion in 1980.

### Liberalised Lending by the Fund

The IMF's policy setting Interim Committee approved new lending programmes under which the members would be allowed to borrow currencies worth up to 200 per cent of the IMF quotas a year and to make these drawings for three consecutive years which would mean that their maximum drawings, outstanding at any one time could be as high as 600 per cent of quotas as against 125 per cent of quota under the previous rules. This is in addition to the balance of payments assistance available under the existing facilities mentioned above.

In 1980, IMF's lending to poor countries more than tripled to \$9,144 billion as against \$2,838 billion in 1979. India would for the first time borrow from the IMF Trust Fund about Rs. 550 crore.

Thus the Fund is prepared to play an expanded role both by lending larger amounts in relation to quotas and through stretching adjustment and financial assistance over larger periods.

### Fund Conditionality

In recent years, the IMF started attaching conditions to the use of the Fund's resources by the members to support circumstances. These conditionality practices naturally varied with the changing nature of the condition of the borrowing member and the nature and the dimension of the problems faced by it. The object is to safeguard the revolving character of the Fund's resources and to meet the genuine needs of the country concerned. Owing to



the severe and widespread payments imbalances of 1970's, the Fund's conditionality practices assumed an elaborate character. For instances, under the 1975 oil facility, the borrowing members were required, in addition to qualitative commitments, to provide a quantitative description of the policies that they intended to pursue to solve their balance of payments problem. These quantitative targets of the programme constituted what has come to be known as *performance criteria*.

A typical example of the conditionality clause is furnished by the loan of Rs. 5000 crores granted to India in 1981. In memorandum submitted to the Fund, the Government of India agreed on two sets of criteria (a) *adjustment criteria* and (b) *performance criteria*. The *adjustment criteria* included such policies as curbing the inflationary spiral, correcting the adverse balance of payments, reduction in the quantum of deficit financing, reduction in credit to the economy particularly of net bank credit to the government sector. The *performance criteria* related to the performance of the economy in terms of growth rate or in other concrete and quantitative terms such as money supply, the budgetary deficits, the quantum of bank finance, etc. These conditions in effect require that the economy should function efficiently, the resources utilisation should be optimal and there should be no under-utilisation of capacities.

### Critical Evaluation

The International Monetary Fund has been criticised by Third World governments intent on growth with social justice for its ideological bias to an unfettered market economy and free enterprise. It is also accused of frustrating efforts to protect the "weaker sections of the population" by insisting on cutting down spending on welfare measures as a condition for its loans. By insisting on short-term "performance" tests for "adjustment policies" it prevents moves towards an equitable restructuring of society.

The net effect of the Fund's prescribed stabilisation programmes, even in the rare cases when these are successful in restoring external balance, has been to worsen the income distribution, reduce growth rates during the period of the programme, and increase the long-term dependence of the economy on imports and foreign investment. Many experts are, therefore, questioning the economic foundations and the relevance of the policies being prescribed by the Fund in the context of developing societies.

The direction of economic policies, they argue, should be a country's own concern, and the Fund must not be allowed to take advantage of a crisis in balance of payments to force a change in a country's development strategy.

These issues are of course known to the IMF. In the face of mounting criticism, the Executive Board of the IMF adopted in 1979, a new set of guidelines on conditions attached to IMF assistance. The new guidelines reflect an awareness of the problems, but leave substantial scope for the exercise of discretion by the Fund's management in the interpretation and application of these guidelines. Among other provisions in the new guidelines, there is the requirement that "the Fund will pay due regard to the domestic, social and political objectives, the economic priorities, and the circumstances of members including the causes of their balance of payments problems".

### Conclusion

Thus the IMF has stepped up its lending to countries that are making serious efforts to adjust their economic policies to current realities.

Fund's lending commitments had amounted to 4,300 million SDRs during 1979 while in the first nine months of 1980 they had risen to 5,900 million SDRs.

In the words of the President of the Fund, "The Fund stands ready to assume an increasing role in recycling and to make flexible and sensible use of its resources".



**BOOK FIVE :**  
**PUBLIC FINANCE**



**Distinction Between Public Finance and Private Finance**

Before we launch on the study of Public Finance, it may not be without interest to note some similarities and differences between government finance and individual finance. It will help us to understand the difference in the method of approach as well as the aim of a government and of an individual.

There are some similarities between the finance of private individuals and that of public authorities: (a) Both have to balance their incomes and expenditure; (b) both try to maximise the benefit with the minimum use of resources; (c) both have to borrow to bridge the gap between their current revenue and current expenditure; and (d) both can increase their income by increasing their investment expenditure. But there are marked differences between the two:

(i) **Adjustment of income and expenditure.** To an individual we preach: "Cut your coat according to your cloth." But a government first settles the dimensions of the coat and then proceeds to arrange for the cloth required. In other words, the individual must live within his income, *i.e.*, he must adjust his expenditure to his income. On the other hand, a government first prepares an estimate of expenditure and then devises ways and means to raise that sum. The government, unlike the individual, adjusts its income to its expenditure.

This, however, is not always true. The individual, too, sometimes first takes a note of his obligations and commitments and then tries to work up his income to the requisite figure. The governments also, sometimes, act like the individuals in adjusting their expenditure to income. When the government realises a surplus, it may decide to increase expenditure in certain desirable directions. And when the

public revenues shrink, the government tries to bring about a corresponding reduction in its expenditure through a policy of retrenchment.

But, on the whole, we can say that there is a real difference in approach towards the finance of an individual and that of a government. The individual ordinarily knows his income and he must arrange his scheme of expenditure accordingly. A government, on the other hand, first calls for an estimate of expenditure from the various departments, settles the total expenditure, and then levies the taxes accordingly.

(ii) **Budgeting.** For the public authorities, the unit of time for the budget is one year. But the individual attaches no special sanctity to the period in which the earth revolves round the sun (*i.e.*, one year). He need not balance his budget by a particular date or during a given period.

(iii) **No internal borrowing for an individual.** In their resources, too, a government and an individual differ. When hard-pressed, a government can borrow both at home and abroad, *i.e.*, it can raise either an internal loan or an external loan or both. But the only way open to an individual is external loan. There can be no internal loan for an individual.

(iv) **Deficit Financing a peculiar privilege of government.** There is another source of income open to a government. It can have resort to the printing press. All belligerent governments, more or less, printed currency notes to meet the huge war expenditure. During the war of 1914-18, Germany almost ruined herself by the reckless issue of currency. When a government feels that the taxable capacity of the nation is overstrained and public confidence has been shaken, it can use this 'hidden hand', wave the magic wand and create money. Can the individual do it? No, unless he is prepared to go behind the bars.

(v) **Different objectives.** Whereas an individual tries to maximise his satisfaction or profit from a

1. For a fuller discussion see Findlay Shirras—*Principles of Public Finance*, 1936, Vol. I, Ch. IV.



given amount of resources, the objective of government expenditure is to maximise social benefit. We have seen that according to the law of equi-marginal utility, every individual tends to so arrange his expenditure that he gets the same marginal utility from every unit of money that he spends. For this purpose, he can weigh the utilities of buying different commodities. But when a government, an impersonal entity, spends money such conscious weighing is not possible, for utility is subjective. This does not, however, mean that public expenditure is indiscriminate.

Further, the governments seek to achieve full employment, an equitable distribution of income and rapid economic growth or economic stability through their fiscal operations. But these objectives have no counter-parts in individual finance.

(vi) **Deliberate and big changes in public finance are easier.** For an individual, big and deliberate changes either in income or in expenditure are not so easy. Everybody likes to supplement or double his income. But how many can do it? In the same manner, a man gets used to a certain standard of living which does not admit of easy alterations and adjustments. But governments are in a much better position to make big and fundamental changes in the scheme of public income and public expenditure. If a socialist party comes into power, it will surely make revolutionary changes both in the State income and State expenditure. The individual finance lacks this elasticity.

(vii) **Provision for the future.** In the matter of providing for the future, a government is much more liberal and far-sighted. The statesman is a trustee for the future generations. Governments spend large amounts of money on schemes of afforestation, public works or social security schemes from which either there may be no monetary return or the return may be delayed for generations. The individual, on the other hand, is anxious to reap quick returns. Human life is so uncertain that some individuals discount the future at a very heavy rate. But the community outlasts the individual. It exists in perpetuity. Hence, the States are bound to make a suitable provision for the future.

(viii) **Surplus budgeting is a virtue for an individual but need not be for the State.** A prudent individual must spend less than he earns. He must have a surplus budget. For an individual this is considered a virtue. But for a State it need not be so. Deficit budgeting during times of a depression to stimulate effective demand has become increasingly acceptable. On the other hand, during periods of inflation, the emphasis is on surplus budgeting so as to reduce the level of effective demand. But surplus budgeting, however, is not necessarily a virtue. It may mean that the level of taxation is kept unnecessarily high and public expenditure is kept unduly low. Certain services, e.g., social services may be

starved. To make surplus budgeting a normal feature is not good finance. We should not make a fetish of a surplus. If big surpluses recur from year to year, it is better either to give relief to the tax-payer or to increase the scale of social expenditure.

(ix) **Individual finance is shrouded in mystery.** Secrecy surrounds individual finance. Every man of money must avoid the unwelcome gaze of others. Individual credit depends not on what a man has but on what he is supposed to have. He must keep the people guessing and try to give them some vague and exaggerated idea about his financial position. But publicity, on the other hand, is the essence of public finance. Budgets are published and the widest publicity is given to them. Publicity strengthens, rather than weakens, public credit.

(x) The private individual lacks the coercive authority which a government has. A government has simply to pass a law and compel the citizens to pay a tax or subscribe to a compulsory loan (e.g., compulsory deposit), but an individual cannot do anything of the kind.

These are some of the features which distinguished public finance from private finance.

### Importance of Public Finance

'Money makes the mare go' is a very common saying. Everybody realises the necessity of money in all he does. If the importance of money is great to an individual it is greater still to a government. Earlier in this chapter, we saw the many functions which we expect a modern government to perform. The importance of public finance thus arises from the increasing functions of the state. It is obvious that, for the performance of these functions, money is needed. The strength of a nation is reflected in its budget. The extent of State activity and its efficiency are primarily dependent upon the length of its purse.

We often complain that educationally India is very backward, that the system of medical relief is utterly inadequate and that agriculture and industry in India are still backward. Why is it so? There is only one answer: lack of funds. The amounts spent on social and developmental services in India are ridiculously small. With the meagre resources placed at the disposal of these services, no spectacular progress can be expected. "The revenue of the State," it has been said, "is the State." Everything depends upon it. Kautilya, the earliest of Indian economists, writing more than 2,000 years ago, said: "The beginning of every undertaking is finance."<sup>2</sup>

The importance of public finance not only lies in the increasing functions of the state as mentioned

2. Shirras Findlay—*Science of Public Finance*, 1939, Vol. I, p. 2.



above but also in the effect of fiscal operations on the economic life of the nation. Public finance can be used as a powerful instrument to bring about desired social and economic changes. For instance, the system of public finance in a country affects the entire economic field. Public finance is no longer considered as a mere means of raising the State revenues. To use Colbert's words, it is no longer considered simply "the art of so plucking the goose as to cause the least amount of squealing." On the other hand, public finance is now regarded as a powerful instrument of social justice. It is employed by modern governments to bridge, as far as possible, the gulf between the rich and the poor. An equitable system of public finance would tax the rich and spend the proceeds in the supply of such services as are calculated to benefit the poor primarily.

The power to tax is really the power to regulate economic activity; it can retard it or stimulate it. The effect of taxation is felt not merely when revenues are raised but also when they are spent. Taxation and public expenditure can be so arranged as to encourage production or guide production along the desired lines. Certain industries can be exempted from taxation or given protection through import duties. Social and development expenditure can stimulate economic growth. As Buchler observes, "And the burdens or benefits resulting from a particular tax policy are not simply monetary, they are also psychological, affecting emotions, the reasoning and the economic behaviour of the tax payers and the community."<sup>3</sup>

In modern times, thus, taxation has a dual purpose: (a) to raise funds for the State, and (b) to achieve its social and economic objectives. Such purposes of Public Finance have today assumed a very great importance.

According to Dalton, the most fundamental principle of public finance is what he calls the principle of Maximum Social Advantage.<sup>4</sup> Public finance operations affect a series of transfers of purchasing power. The tax transfers the purchasing power to the government which is then transferred to the individuals to whom the government makes the payment, such as government contractors and government servants. The one aim underlying all these transfers is the attainment of maximum social advantage. The tests of social advantage, according to Dalton, lie in the preservation of the community and the improvement of both consumption and production.

To an economist, who is primarily concerned with the promotion of human welfare, the importance of the study of public finance is indeed very great.

The importance of public finance lies in the following:—

(i) It is one of the most effective instruments of state control over the economy. It is not merely a means of collecting state revenues and making disbursements.

(ii) The state activities, which have to be financed by public revenues, are ever expanding. This has added to the importance of public finance manifold.

(iii) Growing significance of fiscal policy in tackling economic problems has also increased the importance of public finance.

(iv) The study of public finance is specially important for the under-developed countries. Only a prudent management of state finances is essential to break the vicious circle of poverty in which the under-developed countries are involved. Fiscal policy is a powerful tool for increasing capital formation, accelerating economic growth, increasing national income and raising the level of employment.

The importance of public finance can be easily understood from the functions of public finance which we give below.

#### Functions of Public Finance

According to Musgraves, the major functions of the Public Finance are the following.<sup>5</sup> These functions underline the importance of public finance:

(i) **Allocative Function.** It refers to the process by which total resource use is divided between private and social goods and by which the mix of social goods is chosen. This is done by the budgetary policy.

(ii) **Distributive Function.** The budgetary policy also affects the distribution of income in the community. The tax and expenditure measures are adopted to modify the existing distribution with a view to reducing economic inequalities. In this way, optimal income distribution is brought about.

(iii) **Stabilisation Function.** The budgetary policy can also be used to maintain a high level of employment, a reasonable degree of price level stability, an appropriate rate of economic growth and stability in the balance of payments.

The above functions are sufficient to bring into focus the vital role that public finance plays in modern economic life. In fact, there is no aspect of economic activity which can escape being affected by the budgetary policy.

#### CLASSICAL VIEWS ON PUBLIC FINANCE

In the classical economic theory, it was assumed that in a private enterprise, competitive economy automatically ensures full employment of resources. If the resources are already optimally employed,

3. Alfred G. Buchler—Article on "Taxation and Economy" in *National Journal*, July, 1950.

4. *Principles of Public Finance*, 1948, pp. 10-11.

5. Musgrave, R.A. and Musgrave, P.B. — *Public Finance in Theory and Practice*, 1973, p. 6



there is no need for the government to interfere in the economic life of the country. On this basic assumption, the classical economists laid down certain principles of public finance which are given below:—

(a) **Keep the budget as small as possible.** If it is assumed that private enterprise ensures ideal use of economic resources, then any withdrawal of resources from the private sector to the government must involve less efficient use of resources. Of course, the government needs some resources to carry on its normal activities, but in the interest of efficiency, it is desirable that the size of the government draft on private resources should remain as small as possible, otherwise there will be an unduly wasteful use of resources.

(b) **Keep the budget balanced.** In a situation of full employment, if the government increases its expenditure without increasing its revenues, this will lead to inflationary rise in prices. This follows from the assumption of full employment, so that there are no idle resources willing to be employed. The budget deficit signifies an increase in the demand for resources on the part of the government without the private sector being willing to release the resources. Thus, in the classical theory every budget deficit is inflationary.

(iii) **Borrow only for productive purposes.** If it is necessary for the State to borrow, then this borrowing must be confined to the financing of productive enterprises. Otherwise, borrowing will mean withdrawal of resources from their more productive uses in the private sector to less productive use by the government.

(iv) **Pay off the debt at the earliest.** A debt of the government generally represents an opportunity that has been wasted. Hence, the government should try to repay its debt as early as possible.

(v) **Tax consumption rather than saving.** If we want to pay off the public debt, it is necessary to increase taxation. For this purpose, the government should tax the consumption of the people but not saving, for a tax on saving will reduce the rate of capital formation in the economy.

#### Modern View

Modern economists do not subscribe to any of the principles laid down by the classical economists. Owing to increase in state functions, both qualitatively and quantitatively, the budgets of modern governments have become swollen in size and, what is more, they are continually going up. As for balancing the budget, the modern trend is towards deficit budgeting, especially during depression or recession. Thus, to keep the budgets small and to have a balanced budget is neither feasible nor desirable. Just as a deficit budget is more desirable to combat unemployment, surplus budget is more

suitable during inflation. Through taxation, government seeks to withdraw purchasing power from the public to keep down prices. In the same manner, it is better to tax saving during depression so that consumption is stimulated, and increase in propensity to consume would promote investment. Increase in effective demand will increase income and employment in the country. On the other hand, consumption should be taxed during inflation so that demand is reduced and price rise is checked.

Thus, we see that it all depends on the prevailing economic conditions or the social objectives of the State whether budget should be small or whether it should be balanced or deficit or surplus or what should be the income and expenditure of the State. In other words, public finance should be functional. The eminent economist, the late Lord J.M. Keynes, who brought about a revolution in economic science by propounding his income and employment theory, rejected the above-mentioned principles of public finance of the classical economists. We shall now give Keynes' view of public finance and shall explain the concept of functional finance arising from his views.

#### KEYNESIAN VIEWS ON PUBLIC FINANCE

As discussed in an earlier chapter, Keynes challenged the classical view that private enterprise economy automatically ensures full employment. On the other hand, he said that employment depended on effective demand and there is no guarantee that there will always be adequate effective demand to generate full employment. Unemployment arises because of the deficiency of demand. And, when there is unemployment, the classical prescription of public finance is no longer valid.

If there are unemployed resources, there is no special virtue in keeping the budget small and balanced. When resources are unemployed, it is the duty of the State to increase effective demand by increasing its expenditure. Far from being an evil, a budget deficit during a depression helps to raise the level of employment and output. Similarly, when resources are unemployed, it is no longer true that the use of resources by the government is unproductive and inflationary and, therefore, there is no special virtue in not resorting to borrowing to finance an increase in government expenditure. Similarly, during periods of demand deficiency, it is no good taxing consumption; it is better to tax saving rather than consumption, as we want to raise the level of demand, and not reduce it.

With the Keynesian revolution, therefore, the scope of public finance has been greatly enlarged. It is emphasised that it is the duty of the fiscal authorities to avoid the extremes of both depression as well as inflation.



During a depression, fiscal policy should help in increasing demand. For this purpose the government can increase its expenditure and spend more on public works. This will provide employment to more people. Or else, the government can increase its expenditure on subsidies to producers of mass consumption commodities so as to increase consumers' spending. Similarly, the government can lower its tax rates so as to stimulate consumption and investment. Thus, a budget deficit during a depression is a positive help in fighting unemployment.

On the other hand, during periods of inflation, there is too much of demand; hence the government should reduce its own expenditure and also curb private spending by increasing taxes. Thus, in periods of inflation, we should have surplus budgets. Therefore, there is no inherent superiority in a balanced or a surplus budget. It all depends on the prevailing economic situation.

This view of public finance is called by the name of **functional finance**, because revenues and expenditures are not to be considered as being occasioned solely by the requirement of government finances but with regard to the requirements of attaining and maintaining full employments.

### THE PRINCIPLE OF MAXIMUM SOCIAL ADVANTAGE

Just as an individual seeks to maximise his satisfaction or welfare by the use of his resources, similarly the State ought to maximise social advantage or benefit from the resources at its command.

This is one principle for judging the desirability or otherwise of public finance operations. The public finance operations include both taxes and expenditures. Each such operation, whether it be the imposition of a tax or incurring of public expenditure, affects economic life of individuals or the community as a whole and we want to see that it promotes maximum social welfare. In order to determine whether the tax or the expenditure has proved to be of the optimum benefit we apply the **Principle of Maximum Social Advantage**. This has been called The Principle of Public Finance. As Dalton observes, "This (principle) lies at the very root of public finance." According to him "the best system of public finance is that which secures the maximum social advantage from the operations which it conducts."<sup>6</sup> It may also be called the Principle of Maximum Social Benefit. Pigou has called it the Principle of Maximum Aggregate Welfare<sup>7</sup> and we may repeat it applies to all public finance operations, viz., taxes, public expenditure and public borrowing.

**Attainment of maximum social advantage requires that:**

- (a) both public expenditure and taxation should be carried out up to certain limits and no more;
- (b) public expenditure should be utilised among the various uses in an optimal manner; and
- (c) the different sources of taxation should be so tapped that the aggregate sacrifice entailed is the minimum.

Let us take these one by one.

### Limits of Public Expenditure and Taxation

Dalton has enunciated this principle thus: "Public expenditure in every direction must be carried just so far that advantage to the community of a further small increase in any direction is just counter-balanced by the disadvantage of a corresponding small increase in taxation and in receipts from any other source of public income. This gives the ideal of public expenditure and of public income."<sup>8</sup> It is clear that the principle covers both expenditure and revenue.

Pigou has stated the same law in the following words which are more or less similar: Expenditure should be pushed in all directions up to the point at which satisfaction obtained from the last shilling expended is equal to the satisfaction lost in respect of the shilling called up on government service."<sup>9</sup> Here again, as in Dalton's statement, there is balancing of utility of expenditure with the disutility of a tax.

This principle indicates the limits up to which both public expenditure and taxation should be carried out.

This is the same principle by acting on which a consumer maximises his satisfaction and a producer maximises his profit. A consumer's satisfaction is maximised when the marginal utility of the last unit of a commodity purchased is equal to its price. This is how he balances the benefit from the purchase of the commodity with the sacrifice he has made in the form of a price. In the same manner, a producer maximises his profit when he has equalised the output of the marginal unit of a factor of production with the payment he has made for it, i.e., when marginal productivity is equal to price.

In the case of public finance, the government should try to maximise the benefit to the community as a whole from its public finance operations. The community's welfare is maximised when marginal social utility of an item of expenditure has been equated to the marginal social disutility of the tax imposed for the purpose. Obviously, expenditure confers a benefit and the tax entails a sacrifice and the two must be balanced against one another. II.

6. Dalton—*Public Finance*, pp. 6 and 7.

7. Pigou, A.C.—*A Study in Public Finance*, p. 43.

8. Dalton—*Public Finance*, p. 7.

9. Pigou, A.C.—*Public Finance*, p. 31.



for instance, the benefit is greater than the sacrifice entailed, it is an indication that the expenditure should be increased further in this direction: and, if, on the other hand, the sacrifice is greater than the benefit, the tax must be reduced. Only at the point of equilibrium of the two (tax and expenditure) will there be the optimum or maximum welfare of the community as a whole.

Public finance operations involve series of transfers of purchasing power from some people to the government by means of taxation and from the government to the people by way of public expenditure. The tax payers make a sacrifice and public expenditure confers a benefit. The ideal system of public finance is one where the net benefit (*i.e.*, the aggregate benefit minus sacrifice) is the maximum. This is what the principle of maximum social advantage means.

#### Public Expenditure: Maximum Social Welfare

Achieving maximum social advantage also involves the use of the principle of equi-marginal utility. We know that a consumer maximises his satisfaction by arranging his expenditure in such a manner that the utility of every rupee that he spends on different commodities is equal. The government also should act on the principle of equi-marginal utility in order to maximise social advantage from the alternative modes of expenditure.

Public expenditure has to be incurred on numerous items, *e.g.*, defence, law and order, social and development expenditure. No government can just heedlessly go on spending its revenues. It knows of the various demands on public revenue. A wise government should exercise all possible discrimination between the various uses to which public revenue can be put. It should arrange a list of priorities, just as a prudent consumer does. A consumer has also to spend his income on a number of items like food, clothing, housing, *etc.* Only by striking a proper balance between the various items of expenditure can he derive maximum satisfaction out of his resources.

How does he do it? By equalising marginal utilities of the purchases he makes. The government should also do the same. Suppose it has to develop both agriculture and industry. It should spend its resources on each in such a manner that the marginal utility from the two is equal. If it finds that it has overspent in the development of industries and under-spent on agriculture, it should increase its expenditure on agriculture and decrease on industry so that the benefit from the two types of expenditure is equal. In this way, the public revenues will have been spent in the best possible manner from the social point of view, *i.e.*, the social advantage will be maximised. In other words, the principle of maximum social advantage states that social marginal utility from each direction of public ex-

penditure is equal. Obviously, if expenditure is pushed too far in any particular direction and the government has been miserly in some other desirable direction, the social advantage will be less than maximum. By acting on the law of substitution of equi-marginal returns, the social advantage from public expenditure can be maximised.

#### Distribution of Tax Burden: Minimum Social Sacrifice

We have seen above the proper limits of expenditure and taxation and the allocation of public expenditure among the various items which would be in keeping with the principle of maximum social advantage. Let us now see how the tax burden should be distributed in the community so that the sacrifice entailed is the minimum (or the advantage is maximised). Each tax calls forth for a sacrifice from the tax payer. A wise government should see that this suffering or sacrifice is not increased unnecessarily. The sacrifice entailed by the various taxes should be compared and optimum combination of the taxes should be found out.

For instance, if it is felt that raising of the income tax and corporation taxes further will result either in increasing the sacrifice entailed or in the discouragement of productive enterprise, it will be better not to put extra burden on the income-tax payers, and instead, commodity taxation (especially taxing luxuries) may be resorted to. In this way, the tax burden will be more equitably distributed.

We can lay down broadly that the tax system as a whole should conform to the various canons of taxation. Above all, it should be equitable and convenient. The broadest shoulders should be made to bear the heaviest burden. In that way, the burden on the community as a whole will be the minimum and the tax system as a whole will confer the maximum social advantage.

#### Diagrammatic Representation

The Principle of Maximum Social Advantage has two main aspects, *viz.*, one relating to public expenditure and the other taxation. The principle of maximum social welfare applies to the expenditure side and the principle of minimum sacrifice applies to taxation. In other words, public expenditure has to be so distributed among the various items so that the total benefit to the society is maximised. As for taxation, its burden is to be so distributed in the community that it entails the minimum social sacrifice.

As more and more funds are collected from the people by way of taxation, marginal social sacrifice increases. Hence, the marginal social sacrifice curve rises upwards from left to the right. On the contrary, since with every increase in expenditure marginal social advantage decreases, its curve slopes downwards from left to right. This is shown in the



following diagram (Fig. 60.1) where amount of money is shown along the X-axis and marginal

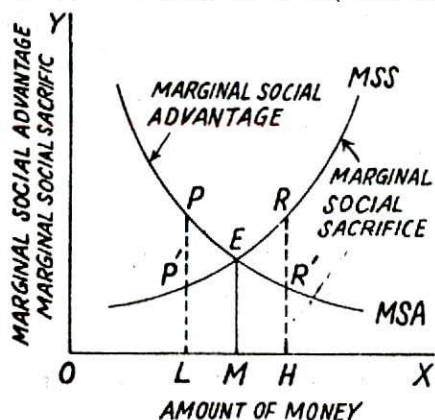


Fig. 60.1

social advantage and marginal social sacrifice on the Y-axis.

Government should increase taxation if the marginal social benefit derived from its expenditure is greater than the marginal social sacrifice entailed thereby, because in this way there will be derived net social advantage. The net social welfare or advantage will be maximum where the marginal social sacrifice from taxation is equal to the marginal social advantage from expenditure. This is at the point E or at the amount of money OM in the diagram where the curve MSS (Marginal Social Sacrifice) and the curve MSA (Marginal Social Advantage) intersect. That is, if the amount of money OM is raised by taxation and the same is spent in public expenditure, the net social advantage is the maximum. Hence, the amount OM represents Optimum Public Finance. In other words, if amount of taxation and that of public expenditure is more or less than OM, then the social advantage or welfare will not be the maximum.

For example, if the amount is less than OM, i.e., OL, the maximum social advantage is PL but the marginal social sacrifice is P'L which is much less; hence it is advantageous to increase the amount; this increase will go on till it reaches OM where again the marginal social advantage and the marginal social sacrifice are equal. If, on the other hand, the amount is greater than OM, i.e., OH, then the marginal social sacrifice HR is much greater than the marginal social advantage H'R. Taxation is too much and it must be cut down to OM where the marginal social advantage and marginal social sacrifice are equal to each other. This is the optimum point or point of maximum social advantage; here the net aggregate welfare is maximised. This is what the Principle of Net Aggregate Social Welfare or Maximum Social Advantage says.

## Conclusion

Thus, we may conclude that the Principle of Maximum Social Advantage will be satisfied if (a) the marginal utility from each direction of public expenditure and marginal disutility of taxation, borrowing, etc., are the same, (b) marginal utility from each item of public expenditure is the same and (c) marginal sacrifice from each type of taxes is the same.

## Criticism of the Principle of Maximum Social Advantage

It must be pointed out, however, that these are only theoretical principles. As a general principle perhaps no exception can be taken to it. But when we come to the actual application several difficulties crop up:

(i) **Difficulty of Measuring Sacrifice and Benefits.** We know that public expenditure confers benefits and taxation entails a sacrifice. The Principle of Maximum Social Advantage assumes that the benefits and sacrifices are calculable. This is not a valid assumption since exact measurement in such cases is out of the question. For example, how can we estimate in quantitative terms benefit resulting from a certain expenditure on education, public health or police? There is no objective measure available for this purpose.

Similarly, in the case of a tax, we can at best assess its money burden but not the real burden. Whereas a tax entails a sacrifice it has also several good and bad side-effects. A tax may reduce consumption, but it can also promote saving and investment so as to raise the level of income and employment in the country. It is difficult to measure and balance sacrifices and benefits of taxation. Taxation affects consumption, prices and factor allocation. If all these good and bad effects are borne in mind, it is really impossible to say what have been the benefits and sacrifices to society. Correct measurement of benefits and sacrifices is still more difficult.

Besides, in the principle of maximum social advantage, the sacrifices entailed in taxation and benefits conferred by expenditure are sought to be measured in terms of utility, and utility to different individuals is compared. That is, it involves inter-personal comparison of utility. But the well-known economist Robbins has declared that the inter-personal comparison of utility is unscientific. Utility is subjective; it cannot be measured and it cannot be compared. Prof. J.R. Hicks has pointed out the shortcomings of cardinal measurement of utility. There is no doubt that it is difficult, nay impossible, to measure the social sacrifice of taxation and public benefit of expenditure. Hence, it is difficult to put into practice the principle of maximum social advantage which is based on measurement of social



sacrifice of taxation and public benefits of expenditure in terms of utility.

(ii) **Impropriety of the use of Equi-marginal Utility in Public Expenditure.** We know that an individual consumer maximises his utility from a certain expenditure by acting on the law of equi-marginal utility. But this law cannot be extended to public expenditure, since public expenditure is not supposed to benefit particular individuals. Most of the public expenditure confers a collective or social benefit as distinguished from individual benefits, e.g., public expenditure on defence, on general administration, maintenance of law and order, economic development, etc. How much benefit accrues to individuals, cannot be ascertained. Hence, if individual benefits cannot be ascertained, it is impossible to equi-marginalise their utility.

(iii) **Difficulty Arising from the Huge Amounts of Taxation and Expenditure.** In the principle of maximum social advantage, it is said that the marginal benefit of public expenditure to various individuals should be equalised and similarly, the marginal sacrifice of taxation of the various individuals should be equalised. But actually it is not possible to equalise marginal units. The State has to spend crores of rupees on education, on public health, on defence, and so on. It is simply out of the question to equalise their benefits and sacrifices in terms of marginal units.

(iv) **Replacement of the Principle of Maximum Social Advantage by Functional Finance.** Most of the modern economists have adopted the concept of functional finance instead of the Principle of Maximum Social Advantage. This is due to the fact that in the principle of maximum social advantage the revenue raised by the government through taxation and public expenditure must be equal. That is, the budget must be a balanced one. But a balanced budget is not necessarily useful for the economy. The great economist, late Lord J.M. Keynes, showed that during depression, when there is widespread unemployment, it is more beneficial to have a deficit budget. Similarly, in an inflationary situation, surplus budget is called for. Whether the budget should be balanced or surplus or deficit, it depends on the economic conditions prevailing at the time. This means that budget is an instrument for the achievement of certain objectives or it has to fulfil certain functions, e.g., to remove unemployment and achieve full employment or to check inflation or to accelerate economic development, and so on. The budget has to be deficit or surplus according to the objectives to be achieved and the taxation and public expenditure policy has to be shaped accordingly. This is the concept of functional finance which we shall explain more fully presently.

**Conclusion.** In spite of the difficulties and limitations mentioned above, the principle of maximum

social advantage is of fundamental importance in public finance. The public finance operations of modern governments are no doubt governed by considerations of maximum social benefit whether exactly measurable or not. This principle serves as a good guide for conduct of public finance operations.

As a practical interpretation of the principle of maximum social advantage, Dalton has laid down the following guidelines for modern governments.

(i) They should make adequate provision for defence against external aggression and for maintenance of peace and stability in the country.

(ii) Production should be improved. For improving production, productive efficiency of the workers should be improved, organisation of production should be improved and productive resources should not be wasted. Further, the composition of national output should be improved so that the goods and services produced conform to the consumers' preferences.

(iii) The distribution of national income should be improved, i.e., it should be more evenly distributed. This can be done by progressive taxation and by increasing transfer expenditure like old-age pensions, social insurance, provident fund schemes, etc. That is, the rich should be taxed more heavily and a larger share of public expenditure should go to benefit the poor.

(iv) Business fluctuations should be reduced and economic stability ensured. This can be done by the government increasing its spending during depression and reducing it during the periods of boom.

According to Dalton, a government will be conferring maximum social advantage by conducting its public finance operations in such a manner as to achieve the above objectives.

### CONCEPT OF FUNCTIONAL FINANCE

We have referred above to the concept of functional finance, especially in the Keynesian views on public finance. The main point in Keynesian view of public finance is that Keynes has given it the form of functional finance. The essence of functional finance is that public finance should be used as an instrument for the achievement of certain economic and social objectives. Before Keynes, the sole concern of public finance was to raise sufficient revenues for meeting public expenditure. In other words, before Keynes, public finance was concerned with the raising of financial resources for the State. But Keynes made a fundamental change in the nature and scope of public finance. Keynes and his followers emphasised that public finance is to help in the achievement of certain social and economic objectives and finance some essential economic activities.



Keynes underlines the fact that the taxation and public expenditure policy of the State vitally affects the level of income and employment in the country. Keynes showed that during depression, the government can remove depression by increasing its expenditure on public works and raise the level of income and employment in the country. When the government increases its investment expenditure on public works, then the level of income and the volume of employment in the country increases many times more than the initial investment. This is in accordance with the Keynes' Income Multiplier.

It is clear that the function of public finance is not merely to raise financial resources for the State but to help in the performance of certain important tasks facing the economy, e.g., raising the level of income and employment in the economy. This is entirely a new concept altogether different from the classical view of public finance. It may be mentioned here that the term 'functional finance' was first used by an American Professor Lerner. But it is more explicit in the Keynesian theory of Income and Employment and Keynes put it more emphatically. It was Keynes who strongly advocated that public expenditure on public works should be increased to remove depression and unemployment and to increase national income and employment in the country.

When there is inflation in the economy and the prices are soaring higher and higher, the government should levy heavy taxes and in this way withdraw purchasing power from the people and should also reduce its own expenditure. The demand having been reduced in this way, prices would tend to come down. It is clear that to fight inflation, the government should frame a surplus budget. A surplus budget means that the government should collect more money from the public by imposing more taxes but keep its expenditure less than the revenue raised. The result will be that less purchasing power will be left with the people and the aggregate demand for goods will be reduced. Consequently, the prices will have a tendency to fall. On the contrary, as we have seen above, the government should increase its expenditure during depression more than its revenue. The deficit can be covered by deficit financing, i.e., by creating new money. The result of deficit financing is that the purchasing power with the people increases and aggregate demand for goods and services increases. Owing to increase in aggregate demand and the operation of the multiplier, the depression will tend to disappear and the economy will move towards full employment.

It is clear from the above analysis that the essence of functional finance is that the government should solve both the problems of depression and inflation by making appropriate changes in its taxation and expenditure policies. By removing both depression

and inflation, it should establish an equilibrium in the economy at the level of full employment. Public finance has this important function to perform in developed or advanced countries.

But in under-developed countries like India, the problem is not so much of cyclical instability as of promoting economic development and accelerating economic growth. The under-developed countries are caught up in the vicious circle of poverty and their main problem is to break this circle and move towards economic development so that poverty is removed and the living standard of the people is raised. Thus, the objectives of public finance in under-developed countries are different from those in the developed countries. Whereas in the developed countries, the objective is to ensure economic stability at the level of full employment, in the under-developed countries, its function is to accelerate economic development so that the widespread unemployment and poverty prevailing in the country are removed. Hence, in the under-developed countries, public finance is to play a developmental role.

Besides the main function of accelerating economic growth, public finance has, in the developing countries, also to check price hike and reduce inequalities of income and wealth. Reduction of inequalities in income and wealth can bring about social justice in the country. Hence, in the developing countries, the objective of public finance is to ensure growth with social justice.

We may repeat that the essence of functional finance is that public finance is not merely an instrument of raising financial resources for the State, but it has also to perform several other important functions for the economy. The functions of public finance are, however, different in the developed and under-developed or developing economies. Whereas in the developed countries, its objective is to eliminate cyclical fluctuations and maintain economic stability, in the under-developed countries, its function is to give a fillip to capital formation and economic development.

The concept of functional finance was made very clear in his budget speech on February 8, 1975 by Mr. C. Subramaniam, the Union Finance Minister. He says, "what, one might ask, has been the underlying approach, the basic philosophy, in framing these (i.e., the budget) proposals? Is it merely an ostrich like exercise to balance receipts and expenditure of the exchequer? Or does the budget seek more positively and purposively to subserve larger national objectives? The answer is, of course, clear and unequivocal. We do look upon the budget as an important tool for reaching our cherished socio-economic goals. Development, the security of our country and growth along with social justice continue to govern our priorities. These objectives determine the decisions on how much to spend, on



what programmes to spend and in what manner the resources are to be raised." <sup>10</sup>

### ROLE OF PUBLIC FINANCE IN A DEVELOPING ECONOMY

In a developing economy, the State must play a very active role in promoting economic development and public finance is the instrument that the State must use. This instrument has to be used to break the vicious circle of poverty and to accelerate economic growth. Hence, the great importance of public finance in under-developed countries desirous of rapid economic development.

There are several reasons why the State must play an important role in a developing economy. The vast and varied natural resources have yet to be exploited and this is obviously beyond the capacity of individual citizens or group of them forming corporations. The technical know-how is lacking; means of transport and communications are under-developed; and irrigation and power need rapid development. Who can do these things except the State? Low ratio of savings to national income in under-developed countries is another compelling reason for the State to step in to promote capital formation.

#### As an Instrument of Capital Formation

Capital formation is of strategic importance in the matter of rapid economic development and the under-developed economies suffer from capital deficiency. It is, therefore, necessary to achieve a higher ratio of savings to national income. This can be best done through fiscal measures.

People of developing countries are extremely poor and they can hardly make two ends meet, not to speak of making a saving. The government has to see how savings can be generated and capital formation promoted. There are some rich people too who are in a position to save but do not save since they indulge in conspicuous consumption. The increased incomes arising from whatever little economic development is made are spent under the demonstration effect in imitating the higher standards prevailing in the developed countries. The result is that not much money is available for productive investment. The government can raise financial resources for development by levying taxes on the rich. Thus, when voluntary savings are not forthcoming, the government generates forced savings through taxation. In this way, savings in the country can be increased. It may be pointed out that a tax is a collective saving which is available for capital formation through the government.

It does not follow from the above analysis that people should reduce their consumption. Rather, it

indicates that they should save relatively more from their increased incomes. That is their marginal rate of savings should be greater than their average rate of savings. When the marginal rate of savings increases, the average rate of savings also goes up with the result that capital formation and economic development in the country are accelerated.

In early days of capitalism, payment of low wages and the existence of inequality of incomes helped capital formation. But no democratic country can adopt this method in modern times; the effort rather is to raise wages and reduce inequalities of income and wealth.

Under a regime of socialistic dictatorship, capital formation is brought about by ruthlessly curtailing consumption and keeping down the standard of living. But in modern democracies, to raise the standard of living is the first concern of the State. Hence, the State must rely on other methods to raise capital resources for economic development. This increases the importance of public investment side by side with private investment. Taxation can be used to generate collective savings and also to promote private investment.

A well-conceived scheme of taxation is a surer way of raising the ratio of savings which is one of the crucial determinants of the rate of economic growth. As Nurkse says, "public finance assumes a new significance in the face of the problem of capital formation in under-developed countries."

#### As an Instrument for Regulating Consumption and Production

There are other methods also, besides public finance or fiscal policy, by which capital formation can be promoted, e.g. taking the various means of production under government control.

But in a democratic society like that of India there is an inherent dislike for direct (physical) control and regulation by the state. The entrepreneurs would not like to be ordered about to produce this or that, how much to produce or where to produce. Incentives in the form of tax concessions rebates or subsidies are, therefore, preferable. Through appropriate fiscal measures it can discourage unproductive investment, and encourage productive investment. Similarly, the consumers would not like to be told directly to curtail their consumption or to consume this and not to consume that. Taxation of articles whose consumption is to be discouraged is, therefore, preferable.

Hence, a democratic State must rely on indirect methods of control and regulation and this is done through fiscal and monetary policies.

Also, under a democratic constitution, a State cannot command resources. It must, therefore, operate through price-mechanism which is susceptible to the influence of public finance. Thus, in democratic countries, public finance is the most

10. *Times of India*, March 1, 1975, p. 4.



powerful and least undesirable weapon on which the States can rely for promoting economic development. In this way, they can raise resources not only for the public sector but also encourage savings and investment in the private sector.

### Matching Physical Development

In any plan of economic development, a physical plan must be matched by a financial plan. The Indian Planning Commission says, "It must be emphasised that the balance to be achieved in the plan has to be both in real and financial terms. Money incomes are generated in the process of production and supplies are utilised in response to money demands. It is important, therefore, to operate upon and modify money income flows so as to maintain a balance between the supply of consumer goods and the purchasing power available for being spent on them, between savings and investment and between receipts and payments abroad." 11

It is quite clear that only through fiscal and monetary measures—the chief instruments of public finance—the financial plan can be implemented and targets in money terms achieved. Hence, public finance has a vital role to play in the development programmes of a developing economy.

### Influencing Rates of Saving and Investment

Public finance can exercise an important influence in increasing the rate of saving and investment. For example, the tax system can be so devised as to discourage the consumption of less essential goods and thereby release resources for being employed in more productive channels. Further, the tax system can be used to increase public saving which in turn can be used to finance an increase in public investment. On the expenditure side, there is positive need for public investment, especially in those branches of economic activity where the private investors are not easily tempted—for example, the development of means of transport and communications, basic heavy industries, education and research. Such investments are very often the very foundations of rapid economic advance. Since the government takes active part in economic development by launching public sector enterprises, it has to raise resources for the expansion of the public sector. Not only more taxes have to be levied but resources have to be raised through public borrowing too and also deficit financing (newly created money).

### Conclusion

Thus, public finance is of crucial importance in accelerating the pace of development in under-

developed countries by promoting capital formation. It can help reduce inequalities of wealth and income in the country, thus ensuring growth with social justice. For this purpose, progressive taxes like wealth tax, death duties, etc., are levied on the rich and social security provided for the poor with the proceeds. Fiscal and monetary measures can also be used for checking price rise and thus ensuring growth with stability. Thus, public finance in developing economies has to be functional and help in the achievement of economic and social objectives.

### ROLE OF PUBLIC FINANCE UNDER DIFFERENT ECONOMIC SYSTEMS

It is well-known that public finance is not regarded merely as an instrument for collecting revenue for the states but is now increasingly used as an instrument for the achievement of certain economic and social objectives, whatever the economic system. The basic role of public finance is to mobilise resources through taxes, loans, etc. and utilise these resources for accelerating economic growth and for bringing about the desired redistribution of income and wealth in the community.

In capitalist countries, there is private property and private ownership of means of production and the profit-motive provides the incentive for economic activity. Most of the wants of the people are satisfied through price mechanism in the market economy. However certain services are supplied collectively by the State on payment of a reasonable price, while others are supplied free and are financed by taxation or compulsory levies. Health services, law and order and defence are financed by taxation. Some revenue is raised through public enterprises also. The non-tax revenue are becoming quite important, although the tax revenue still continues to dominate.

In several under-developed countries, where some basic raw materials like crude oil occupy an important place in export trade, state trading provides significant amounts of revenue. Where some industries have been nationalised, significant amount of revenue is provided by the corporations managing such services. The allocation of resources is done on the principle of Maximum Social Advantage. Public utilities, public health, sanitation and education are subsidised by the State. Public finance policy is used in capitalist countries for promoting economic growth and providing employment opportunities. The State also utilises its taxation and expenditure policies to reduce economic disparities.

In Socialist States, means of production are collectively owned by the State and wages and salaries are the main forms of distribution. Taxation accounts for a small part of state revenue, services and goods are collectively produced.

11. *Second Five Year Plan*, pp. 15-16.