12 INFLATION AND DEFLATION

1. MEANING

For a layman, inflation means a substantial and rapid increase in the general price level which causes a decline in the purchasing power of money. Inflation is statistically measured in terms of percentage increase in the price index per unit of time (usually a year or a month). There is no generally accepted definition of inflation and different economists define it differently. Broadly, the phenomenon of inflation has been understood in three ways : (*a*) in the popular sense, (*b*) in the Keynesian sense, and (*c*) in the modern sense.

Common View

Generally, inflation has been defined either (*a*) as a phenomenon of rising prices, or (*b*) as a monetary phenomenon :

1. As a phenomenon of Rising Prices. Definitions given by the economists like Crowther, Gardner Ackley, H.G. Johnson regard inflation as a phenomenon of rising prices. According to **Crowther,** inflation is a ***"state in which the value of money is falling, i.e., the prices are rising."*** In the words of **Gardner Ackley, *"Inflation is a persistent and appreciable rise in the general level or average of prices."*** **Harry G. Johnson** states, ***"I define inflation as substantial rise in prices."***

2. As a Monetary Phenomenon. Economists like Friedman, Coulborn, Hawtrey, Kemmerer, define inflation as a monetary phenomenon. According to **Friedman, *"Inflation is always and everywhere a monetary phenomenon."*** **Coulborn** defines inflation as ***"too much money chasing too few goods."*** **Hawtrey** defines inflation as the ***"issue of too much currency."*** According to **Kemmerer, *"Inflation is too much money and deposit currency, that is, too much currency in relation to the physical volume of business being done."***

Keynesian View

Keynes defined inflation as a phenomenon of full employment. According to him, inflation is the result of the excess of aggregate demand over the available aggregate supply and true inflation starts only after full employment. So long 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. Keynes does not deny that prices may rise even before full employment, mainly due to the existence of certain bottlenecks in the expansion of output. But, he termed such a rise in prices as semi-inflation. It is the true inflation (after full employment), which poses a real threat to the economy and is to be worried about.

Modern View

Modern economists analyse inflation in a comprehensive and unified manner. The modern view of inflation can be summarised in the following way :

(*i*) Generally two types of inflation are distinguished : demand pull inflation and cost push inflation. In the demand pull inflation, inflation and falling unemployment are supposed to go together, while in cost push inflation, inflation and rising unemployment are supposed to occur simultaneously.

(*ii*) During late 1950's A.W. Phillips empirically supported the idea that there existed a permanent long-run trade off between inflation and unemployment which implied that less inflation meant more unemployment and less unemployment would coexist with a higher rate of inflation.

(*iii*) In the late 1960's the monetarists held the view that the trade off between inflation and unemployment existed only in the short-run and not in the long-run. In the long-run when anticipated inflation is equal to actual inflation, inflation and unemployment will simultaneously increase.

(*iv*) The monetarists, like Friedman, Phelps. Leijonhufvud, also combined demand-pull and cost-push inflation as one integrated whole. According to them, inflation is a unified phenomenon in which demand and cost elements appear as a part of one integrated cycle and in which expectations of future price level movements play a prominent role.

Features of Inflation

Following are the main features of inflation :

(*i*) Inflation is always accompanied by a rise in the price level. It is a process of uninterrupted increase in prices.

(*ii*) Inflation is a monetary phenomenon and it is generally caused by excessive money supply.

(*iii*) Inflation is essentially an economic phenomenon as it originates in the economic system and is the result of action and interaction of economic forces.

(*iv*) Inflation is a dynamic process as observed over the long period.

(*v*) A cyclical movement of prices is not inflation.

(*vi*) Pure inflation starts after full employment.

(*vii*) Inflation may be demand-pull or cost-push.

(*viii*) Excess demand in relation to the supply of everything is the essence of inflation.

2. TYPES OF INFLATION

There are different types of inflation which can be classified as under :

A. On the Basis of Speed

On the basis of speed, inflation can be classified as (1) creeping inflation, (2) walking inflation (3) running inflation, and (4) galloping or hyperinflation.

1. Creeping Inflation. It is the mildest form of inflation. It is generally regarded as conducive t economic development because it keeps the economy away from stagnation. But, some economists conside creeping inflation as potentially dangerous. They are of the view that, if not properly controlled in tim creeping inflation may assume alarming proportions. Under creeping inflation, prices rise about 2 per cer annually.

2. Walking Inflation. Walking inflation occurs when the price rise becomes more marked as compared to creeping inflation. Under walking inflation, prices rise approximately by 5 per cent annually.

3. Running Inflation. Under running inflation, the prices increase at a still faster rate. The price rise may be about 10 per cent per annum.

4. Galloping or Hyper-Inflation. This is the last stage of inflation which starts after the level of full employment is reached. Keynes considers this type of inflation as the true inflation. Under the galloping inflation, the prices rise every moment and there is no upper limit to the price rise. The classical examples of hyper-inflation are (*a*) the Great Inflation of Germany after the World War I, and (*b*) the Great Inflation of China after the World War II.

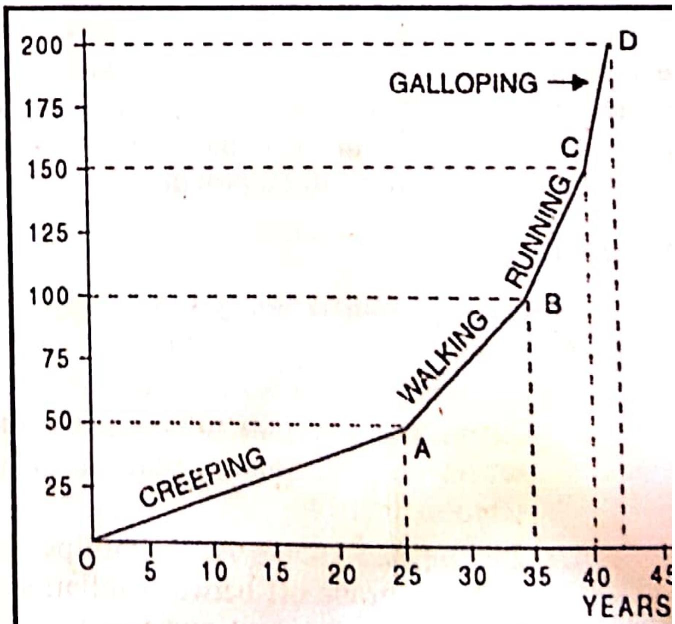

Fig.1

The classification of inflation on the basis of speed is represented in Figure 1. In the first period of 25 years,

4. DEMAND-PULL AND COST-PUSH INFLATION

Broadly speaking, there are two main causes of inflation :

(*a*) increase in aggregate demand for goods and services, and

(*b*) increase in cost of production.

The former results in demand-pull inflation and the latter leads to cost push inflation.

Demand-Pull Inflation

According to the theory of demand-pull inflation, the general price level rises because the demand for goods and services exceeds the supply available at current prices. Demand-pull inflation or excess demand inflation occurs when aggregate demand for goods and services is greater than the available supply of these goods and services at the existing prices level. Excess demand means aggregate real demand for output in excess of maximum feasible, or potential or full employment output at the going price level. Thus, demand-pull inflation may be defined as a situation where the aggregate demand exceeds the economy's ability to supply the goods and services at the current prices, so that the prices are pulled upward by the upward shift of demand function.

On the question of the forces responsible for demand-pull or excess demand, there are two competing theories of demand-pull inflation : (1) the Monetarist theory, and (2) the Keynesian theory.

1. The Monetarist Theory. The monetarist theory of demand-pull inflation is based on the quantity theory of money. According to the quantity theory of money, increases in the supply of money, given its velocity, lead to an increases in the total money expenditure. Assuming full employment, the increased demand will pull prices higher. Thus, according to the monetarists, inflation is a monetary phenomenon.

Figure 3 depicts the monetarist demand-pull inflation using aggregate demand and aggregate supply approach. The monetarists assume a vertical aggregate supply curve (SM curve) at full employment output level (OM). This indicates that money is neutral ; changes in money supply do not affect total output of the economy. Increases in the money supply cause the aggregate demand curve to shift upward from DD to D_1D_1 and D_2D_2. The aggregate supply being unchanged (*i.e.*, OM), increases in money supply raise the price level alone from OP to OP_1 and OP_2.

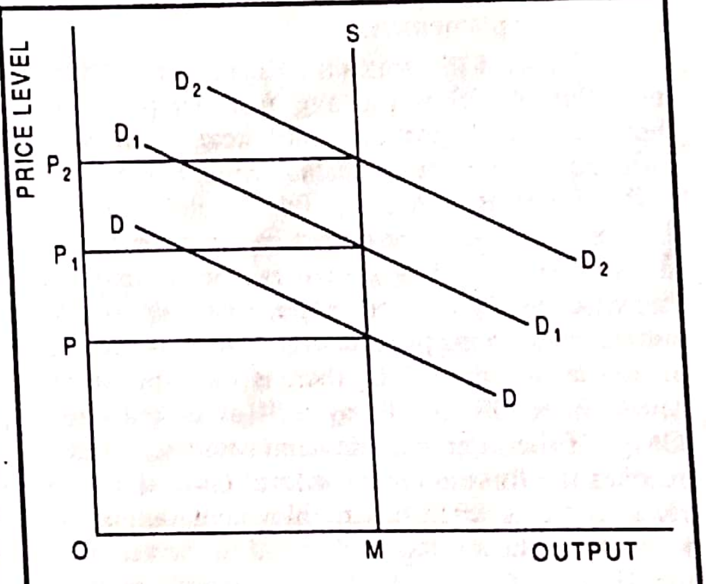

Fig. 3.

The monetarist theory can be studied with respect to static and dynamic conditions :

(*i*) In a static economy, with a given level of output, according to the equation of exchange : MV = PT, increases in the supply of money (M) alone are responsible for increases in the price level (P), assuming the velocity of money (*V*) constant ; P increases in the same proportion as M increases. Thus, the rate of inflation is given by

$$\dot{P} = \dot{M}$$

That is, the rate of change of prices $(\dot{P})$ is proportionate to the rate of change of money supply $(\dot{M}$. Since $\dot{M}$ is a policy variable, the rate of inflation also becomes policy determined.

(*ii*) In a growing economy, real national income (Y) is increasing over time due to the operation of various growth factors. Again, in such an economy, the real demand for money will also be growing over time. According to the Cambridge equation of the quantity theory of money (*i.e.*, M = KPY), the rate of growth of real demand for money will be equal to the rate of growth of real national income because the income elasticity of demand for money is necessarily unity.

The growth rate of real demand for money tells us the rate at which new money can be absorbed in the economy at constant prices. The excess increases in the stock of money will lead to increase in prices and will become inflationary. Thus, for a growing economy, the rate of inflation is given by

$$\dot{P} = \dot{M} - \dot{Y}$$

That is, the rate of increase in prices $(\dot{P})$ is proportionate to the excess rate of increase in the supply of money $(\dot{M} - \dot{Y})$.

2. The Keynesian Theory. According to the Keynesians, inflation occurs when aggregate demand for final goods and services exceeds the aggregate supply at full (or nearly full) employment level. The Keynesian approach differs from the monetarist approach in the following manner.

(*i*) Both the approaches regard potential output as given with the difference that whereas in the monetarist approach, the actual output is always equal to potential output, in the Keynesian approach potential output serves only as the notional short run maximum of feasible output.

(*ii*) Whereas in monetarist approach, excess increases in the quantity of money is responsible for increases in the price level, in the Keynesian approach, the excess increases in the total expenditure (*e.g.*, investment expenditure and government expenditure) are the source of excess demand and hence inflation.

(*iii*) For the monetarists, inflation is a monetary phenomenon ; for the Keynesians, it is a non-monetary phenomenon.

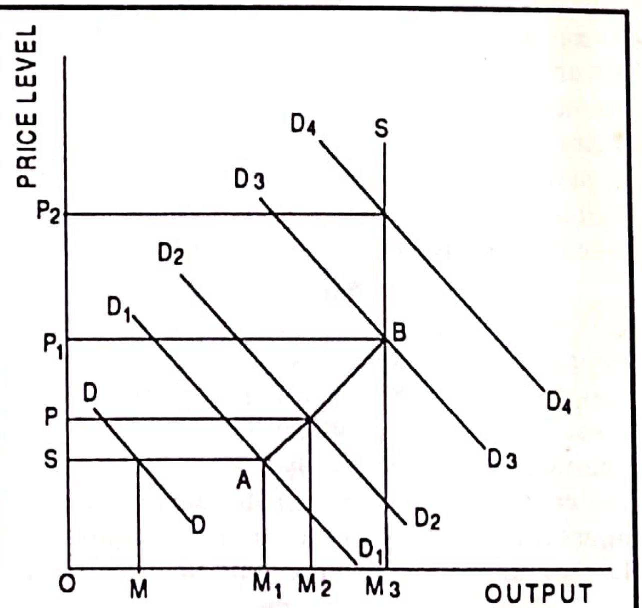

Fig. 4.

Figure 4 illustrates the Keynesian demand-pull theory of inflation. SS is the aggregate supply curve which is horizontal (SA portion) until nearly full employment is reached. It becomes vertical after full employment is reached (after point B indicating full employment output OM_3) because then no more output can be supplied. If aggregate demand curve is DD, output is OM. If aggregate demand increases to D_1D_1, then output increases to OM_1, without any increase in the price level (*i.e.*, OS). If aggregate demand increases further to D_2D_2 there is some increase in the price level (from OS to OP) as well as output (from OM_1 to OM_2). If the aggregate demand increases to D_3D_3, output reaches the full employment level OM_3 and the price level rises to OP_1. After full employment output, any further increase in the aggregate demand in the vertical portion of the SS curve (such as D_4 D_4) will merely produce inflation (rise in the price level to OP_2), with no increase in output. Thus, as long as the economy is beyond the flat range (SA portion) of the aggregate supply curve, increases in demand will pull the prices up *.i.e.* create demand-pull inflation.

Cost-Push Inflation

The theory of cost-push inflation (also called sellers' or mark-up inflation) became popular after the mid 1950s. It attempts to explain the rise in prices when the economy is not at full employment. According to this theory, the prices, instead of being pulled up by excess demand, may also be pushed up as a result of rise in the cost of production. The basis of cost-push theory is that organised groups, both business and labour fix higher prices for their products or services than would prevail in perfectly competitive market. Cost-push inflation is characterised by insufficiency of aggregate demand, unemployment of resources and excess capacity.

In nut shell, the cost-push theory of inflation maintains (*a*) that the true source of inflation is the increase is cost of production, (*b*) that the increase in cost of production is autonomous of the demand conditions, (*c*) that the push forces operate through important cost components, such as, wages, profits or material costs, so that cost push inflation may take the form of wage-push inflation, or profit-push inflation or material-push inflation, (*d*) that the increase in cost of production is not absorbed by the producers and is passed to the buyers in the form of higher prices.

Figure 5 shows the cost-push inflation with the help of aggregate demand function and supply function. Initially, aggregate demand curve (DD) intersects aggregate supply curve (SS) at point E, determining the price level OP at full employment output OM. Now, either due to wage rise or profit rise, the cost of production increases, shifting the aggregate supply curve from SS to S_1S. It intersects the aggregate demand curve at point E_1. The price level rises from OP to OP_1, and the output decreases from OM to OM_1. It shows that the price level and unemployment increase simultaneously. If the government wants to maintain full employment under cost-push inflation, it is possible only at a higher price level

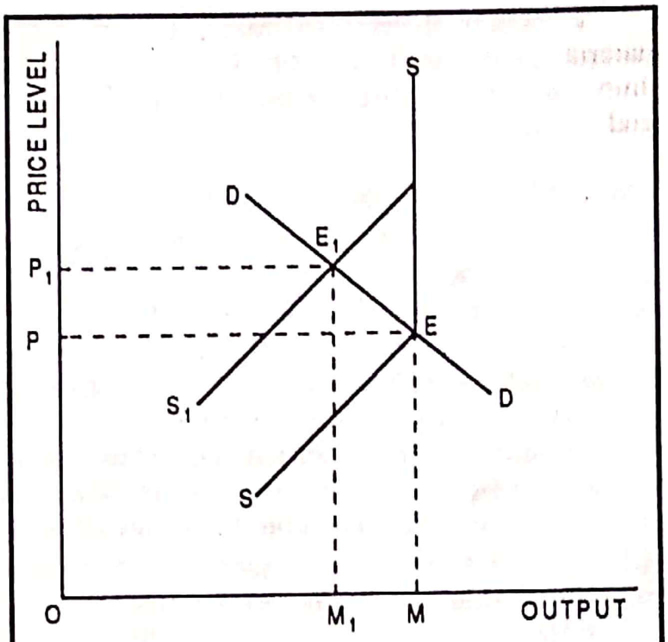

Fig. 5.

Causes of Cost-Push Inflation

There are essentially three causes of cost-push inflation :

(1) wage-push due to union monopoly power,

(2) profit-push due to business monopoly power, and

(3) increasing raw material prices. Accordingly, cost-push inflation can take the forms of wage-push or profit-push or material-push inflation.

1. Wage-Push Inflation. Wage-Push has been considered the main determinant of cost-push inflation because, in the modern times, the trade unions have become very strong and they succeed securing higher wages for their members. This increases the cost of production and, to maximise their profits, the businessmen raise the prices of their products. Critics of wage-push inflation theory put forward the arguments against wage rise as a sufficient and independent cause of inflation.

(*i*) In a number of cases, wage increases are not autonomous, but are induced by the operation of demand-pull factors. For example : (*a*) Wage rise may be induced by an excess demand for labour, which may be the result of excess demand conditions in the commodity market. (*b*) Wage rise may be induced by an increase in the cost of living. Such wage rise is the result and not the cause of inflation (*c*) Wage rise may be induced by increases in the productivity. Such wage rise is price stabilizing rather than inflationary.

(*ii*) For wage-push inflation to occur, it is necessary that trade unions have substantial control over the supply of labour. In a country like India, where the major portion of the labour force is not unionised, trade unions do not have much influence on wages.

(*iii*) Even in countries where trade unions are strong, their wage demands are not totally independent of demand conditions and are influenced positively by the level and growth of employment as well as profits.

To, conclude, there is general agreement to the view that only the wage increases in excess of increases in the labour productivity can be an autonomous cause of wage-push inflation. Thus, the rate of inflation $(\dot{p})$, according to the wage-push inflation theory, is determined by the excess of rate of wage increase $(\dot{w})$ over the rate of increases in labour productivity $(\dot{x})$. Symbolically, $\dot{p} = \dot{w} - \dot{x}$.

2. Profit-Push Inflation. Cost-push inflation also occurs when the monopoly power of the businesses enables them to raise prices to increase their profits. Once started by a few powerful firms, the smaller firms also tend to mark-up their profit margins, partly following the example of leading firms and partly through inter-industry relations, because their material costs have gone up. This kind of price increase is called profit-profit spiral.

3. Material-Push Inflation. Cost-push inflation is also caused by increase in the prices of some key materials, such as steel, basic chemicals, oil, etc. Since, these materials are used, directly or indirectly, in almost all the industries, the increases in their prices affect the whole of the economy and the prices everywhere tend to increase.

Demand-Cum-Cost Inflation

In the actual world, it is difficult to say precisely whether the rise in prices is due to demand-pull factors or cost-push factors. In fact inflation is a combination of both demand-pull and cost-push rise in prices; it may be termed as demand-cum-cost inflation. The demand-pull inflation has the tendency to generate forces of cost-push inflation; when prices rise due to excess increase in aggregate demand, the workers demand higher wages in view of a rise in cost of living. Similarly, the cost-push inflation generates demand-pull elements of inflation; when wages are pushed up, the workers' monetary demand for consumption goods increases due to their higher incomes. Thus, it is wrong to dichotomise the inflationary process into demand-pull and cost-push rise in prices. As **H.G. Johnson** has remarked, ***"The two theories are, therefore, not independent and self-contained theories of inflation but rather theories concerning the mechanism of inflation in a monetary environment that permits it."***

The actual working of the inflationary process is like this : If aggregate demand increases with given output, the prices will rise. As a result, the cost of living will rise and the workers will demand higher wages. When they succeed in it, their incomes will go up and thus aggregate demand will increase. But, on the other hand, higher costs due to rise in wages will push up the prices. Thus, inflation means demand-cost-price spiral.

The combined demand-cum-cost inflation is illustrated in Figure 6. SS and DD are the original aggregate supply and demand curves respectively. They intersect each other at point E, indicating the full employment output level OM. The initial price is OP. When aggregate demand increases from DD to D_1D_1, it intersects the SS supply curve at point E_1 and the price level rises from OP to OP_1. The increase in price level will force the trade unions to secure higher wages for the workers. This will raise the cost of production. As a result, a higher aggregate supply curve S_1S will intersect D_1D_1 curve at point A, showing a reduction in employment (from OM to OM_1) and a rise in price level (from OP_1 to OP_2). In order to achieve full employment, the aggregate demand must increase to D_2D_2. It means that full employment is achieved only at a higher price level OP_3.

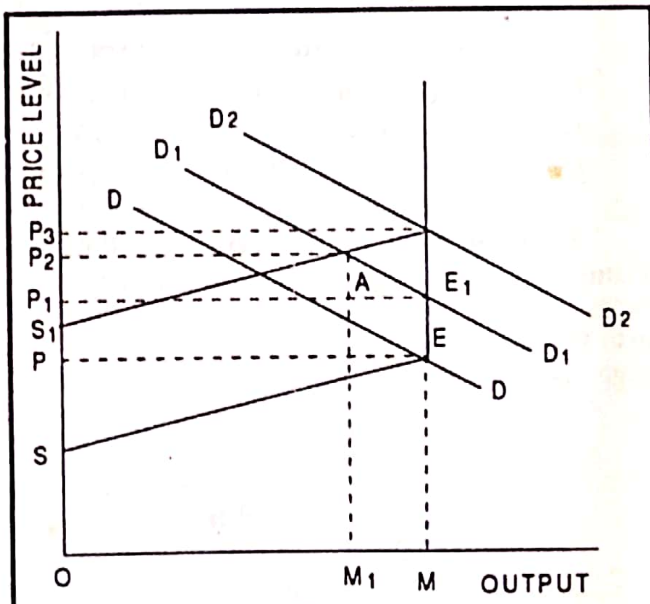

Fig. 6.

To conclude. (*a*) Demand-pull inflation and cost-push inflation move together and lead to cumulative rise in prices. (*b*) The forces behind demand-pull inflation are increases in money supply and aggregate expenditure, while the causes of cost-push inflation are mainly rise in wages, profits and material costs. (*c*) Of the two types of inflation, cost- push inflation is much more difficult to control than demand-pull inflation. Demand-pull inflation can be controlled by adopting proper monetary and fiscal measures. But, it is not easy to reduce cost of production through such measures; a reduction in wage rate, for example, will be strongly opposed by the workers.

5. INFLATION IN UNDERDEVELOPED COUNTRIES

Structuralist View of Inflation

Usually it is assumed that the stage of development makes no difference to the nature and causes of inflation and the theories of inflation relevant to the developed economies can also be used to explain inflation in underdeveloped countries. But, the economists, like Myrdal, Streeten and several other Latin

8. Raises Cost of Development Projects. With the rise in prices, the cost of the development projects also rises resulting in still larger doses of deficit financing on the part of the government. This leads to cumulative rise in prices.

9. Creates Uncertainty in future Expectations. Inflation by creating uncertainty in future expectations affects investment decisions adversely. During the phase of continuous rise in prices, trade unions demand higher wages for workers. Strikes, slow-downs and general deterioration in labour efficiency create uncertainty in future expectations and thus adversely affect investment.

10. Offsetting Factors. The transfer of resources from the consumers to the government or to investors as a result of inflationary development policy may be offset (*a*) by luxury consumption of the entrepreneurial group and (*b*) by the lower efficiency of government investments.

Conclusion. In order to have a proper understanding of the growth impact of inflationary development policies, a distinction must be made between self-liquidating inflation and spiral inflation. While self-liquidating inflation helps economic growth by achieving the objective like altering permanently the distribution of income in favour of investment, the spiral inflation does not serve any growth objectives but rather creates hardships and tensions in the economy.

In the end, the following conclusions emerge from the relationship between inflation and economic development :

(*i*) Inflation is an inevitable price of economic development. Therefore, an efficient development policy should aim at some modest degree of inflation as a means of fully mobilising economic resources.

(*ii*) While a policy of financing development by deliberate inflation has strong attractions, the possibilities of promoting economic development through this policy are quite limited.

(*iii*) The inflationary development policies are likely to retard economic growth by (*a*) distoring the allocation of resources, (*b*) wasting the inflation-gathered resources on consmption (*c*) increasing uncertainties, (*d*) reducing incentives for innovation and improvements, and (*e*) fostering the inefficiencies of protectionism and exchange control.

6. CAUSES OF INFLATION

Inflation is the result of disequilibrium between demand and supply forces and is attributed to (*a*) an increase in the demand for goods and services in the country, and (*b*) a decrease in the supply of goods in the economy.

Factors Causing Increase in Demand

Various factors responsible for increase in aggregate demand for goods and services are as follows:

1. Increase in Money Supply. An increase in the money supply leads to an increase in money income. The increase in money income raises the monetary demand for goods and services. The supply of money increases when (*a*) the government resorts to deficit financing *i.e.* printing of more currency or (*b*) the banks expand credit.

2. Increase in Government Expenditure. An increase in the government expenditure as a result of the outbreak of war, developmental and welfare activities causes an increase in the aggregate demand for goods and services in the economy.

3. Increase in Private Expenditure. An expansion of private expenditure (both consumption and investment) increases the aggregate demand in the economy. During the period of good business expectations, the businessmen start investing more and more funds in new enterprises, thus increasing the demand for factors of production. This results in an increase in factor prices. The increased factor incomes raise the expenditure on consumption goods.

4. Reduction in Taxation. Reduction in taxation can also be an important cause for the generation of excess demand in economy. When the government reduces taxes, it increases the disposable income of the people, which, in turn, raises the demand for goods and services.

5. Increase in Exports. When the foreign demand for domestically produced goods increases, it raises the earnings of exporting industries. This, in turn, will increase demand for goods and services within the economy.

6. Increase in Population. A rapid growth of population raises the level of aggregate demand in the economy because of the increase in consumption, investment, government expenditure and net foreign expenditure. This leads to an inflationary rise in prices due to excessive demand.

7. Paying off Debts. When the government pays off its old debts to the public, it results in an increase of purchasing power with the public. This will be used to buy more goods and services for consumption purposes, thus increasing the aggregate demand in the economy.

8. Black Money. Black money means the money earned through illegal transactions and tax evasion. Such money is generally spent on conspicuous consumption, while raising the aggregate demand and hence the price level.

Factors Causing Decrease In Supply

Various factors responsible for reducing the supply of goods and services in the economy are given below:

1. Scarcity of Factors of Production. On the supply side, inflation may occur due to the scarcity of factors of production, such as, labour, capital equipment, raw materials, etc. These shortage are bound to reduce the production of goods and services for consumption purposes and thereby the price level.

2. Hoarding. At a time of shortages and rising prices, there is a tendency on the part of the traders and businessmen to hoard essential goods for earning profits in future. This causes scarcity and rise in prices of these goods in the market.

3. Trade Union Activities. Trade union activities are responsible for inflationary pressures in two ways (*a*) Trade union activities (*i.e.* strikes) often lead to stoppage of work, decline in production, and rise in prices. (*b*) If trade unions succeed in raising wages of the workers more than their productivity, this will push up the cost of production, and lead the producers to raise the prices of their products.

4. Natural Calamities. Natural calamities also create inflationary conditions by reducing the production in the economy. Floods and draughts adversely affect the supply of products and raise their prices.

5. Increase in Exports. An increase in exports reduces the stock of goods available for domestic consumption. This creates a situation of shortages in the economy giving rise to inflationary pressures.

6. Law of Diminishing Returns. The law of diminishing returns operates when production is increased by employing more and more variable factors with fixed factors and given technology. As a result of this law, the cost per unit of production increases, thus leading to a rise in the prices of production.

7. War. during the war period, economic resources are diverted to the production of war materials. This reduces the normal supply of goods and services for civilian consumption and this leads to the rise in the price level.

8. International Causes. In modern times, a major cause of inflationary rise in prices in most of the countries is the international rise in the prices of basic materials (*e.g.* petrol) used in almost all the industrial materials.

7. EFFECTS OF INFLATION

Inflation is good so long as it is well under control and increases output and employment. It becomes harmful once it goes out of control because then it robs Peter to pay Paul and takes no account of the basic principle of social equality. According to C.N. Vakil, ***"Inflation may be compared to robber. Both deprive the victim of some possession with the difference that robber is visible, inflation in invisible ; the robber's victim may be one or few at a time, the victim of inflation is the whole nation ; the robber may be dragged to a court of law, inflation is legal."***[1] Inflation has wide-ranging influence on economic, social, moral and political life of the country.

1. C.N. Vakil : Financial Burden of War on India.

Its various effects are discussed below :

(A) Effects on Production

According to Keynes, moderate or creeping inflation has favourable effect on production particularly when there are unemployed resources in the country. Rising prices increase the profit expectations of the entrepreneurs because the prices increase more rapidly than the cost of production. They are induced to step up investment, and, as a result, output and employment increase. Hyper or galloping inflation, on the other hand, creates the uncertainty which is inimical to production. Thus, while mild inflation is favourable to production and employment particularly before full employment, hyper inflation is generally harmful for the economy.

The adverse effects of inflation or production are stated below :

1. Disrupts Price System. Inflation disrupts the smooth working of the price mechanism, creates rigidities and results in wrong allocation of resources.

2. Reduces Saving. Inflation adversely affects saving and capital accumulation. When prices increase, the purchasing power of money falls which means more money is required to buy the same quantity of goods. This reduces saving.

3. Discourages Foreign Capital. Inflation not only reduces domestic saving, it also discourages the inflow of foreign capital into the country. If the value of money falls considerably, it may even drive out the foreign capital invested in the country.

4. Encourages Hoarding. When prices increase, hoarding of larger stocks of goods become profitable. As a consequence of hoarding, available supply of goods in relation to increasing monetary demand decreases. This results in black marketing and causes further price-spiral.

5. Encourages Speculation Activities. Inflation promotes speculative activities on account of uncertainty created by a continually rising prices. Instead of earning profits through genuine productive activity, the businessmen find it easier to make quick profits through speculative activities.

6. Reduces Volume of production. Inflation reduces the volume of production because (*a*) capital accumulation has slowed down and (*b*) business uncertainty discourages entrepre-neurs from taking business risks in production.

7. Affects Pattern of Production. Inflation adversely affects the pattern of production by diverting the resources from the production of essential goods to that of non-essential goods or luxuries because the rich, whose incomes increase more rapidly demand luxury goods.

8. Quality Falls. Inflation creates a sellérs market in which sellers have command on prices because of excessive demand. In such a market, any thing can be sold. Since the producer's interest is only higher profits, they will not care for the quality.

(B) Effects on Distribution

Inflation results in redistribution of income and wealth because the prices of all the factors of production do not increase in the same proportion. Generally, the flexible income groups, such as businessmen, traders, merchants, speculators gain during inflation due to wind-fall profits that arise because prices rise faster than the cost of production. On the other hand, the fixed income groups, such as, workers, salaried persons, teachers, pensioners, interest and rent earners, are always the losers during inflation because their incomes do not increase as fast as the prices. Inflation is unjust because it puts economic burden on those sections of the society who are least able to bear it.

The effects of inflation on different groups of society are as follows :

1. Debtors and Creditors. During inflation, the debtors are the gainers and the creditors are the losers. The debtors stand to gain because they had borrowed when the purchasing power of money was high and now return the loans when the purchasing power of money is low due to inflation. The creditors, on the other hand, stand to lose because they get back less in terms of goods and services than what they had lent.

2. Wage and Salary Earners. Wage and salary earners usually suffer during inflation because (*a*) wages and salaries do not rise in the same proportion in which the prices or the cost of living rises and (*b*) there is a lag between a rise in the price level and a rise in wage and salary. Among workers, those who have formed trade unions, stand to lose less than those who are unorganized.

3. Fixed Income Groups. The fixed-income groups are the worst sufferers during inflation. Persons who live on past saving, pensioners, interest and rent earners suffer during periods of rising prices because their incomes remain fixed.

4. Business Community. The business community, *i.e.*, the producers, traders, entrepreneurs, speculators, etc., stand to gain during inflation. (*a*) They earn wind-fall profits because prices rise at a faster rate than the cost of production (*b*) They gain because the prices of their inventories go up, thus increasing their profits. (*c*) They also gain because they are normally borrowers of money for business purposes.

5. Investors. The effect of inflation on investors depends on in which asset the money is invested. If the investors invest their money in equities, they are gainers because of the rise in profit. If the investors invest their money in debentures and fixed income bearing securities bonds, etc, they are the loser because income remains fixed,

6. Farmers. Farmers generally gain during inflation because the prices of the farm products increase faster than the cost of production, thus leading to higher profits during inflation.

Thus inflation redistributes income and wealth in such a way as to harm the interests of the consumers, creditors, small investors, labourers, middle class and fixed income groups and to favour the businessmen, traders, debtors, farmers etc. Inflation, is society unjust because it makes the rich richer and the poor poorer; it transfers wealth from those who have less of it to those who have already too much of it.

(C) Non-Economic Consequences

Inflation has far reaching social, moral and political consequences :

1. Social Effects. Inflation is socially unjust and unequitable because it leads to redistribution of income and wealth in favour of the rich. This widens the gap between haves and have-nots and creates conflict and tension in the society.

2. Moral Effects. Inflation adversely affects business morality and ethics. It encourages black marketing and enables the businessmen to reap wind-fall gains by undesirable means. In order to increase the profit margin, the producers reduce the quality by introduction of adulteration in their products.

3. Political Effects. Inflation also disrupts the political life of a country. It corrupts the politicians and weakens the political discipline. Again, social inequality and moral degradation resulting from inflationary pressures lead to general discontentment in the public which may result in the loss of faith in the government. General dissatisfaction among masses may sometimes result in political revolution or toppling of the government. It was the hyperinflation in Germany during 1920s that made Hitler a dictator. It is correctly remarked : "Hitler is the foster-child of inflation."

In short, inflation is undesirable because of its all-round harmful consequences. It is "economically unsound, politically dangerous and morally indefensible." It should be avoidable if possible, and if it occurs, should be checked before it is too late. (ଅଯୌକ୍ତିକ)
(ଅସମର୍ଥ)

8. CONTROL OF INFLATION

The cumulative nature of the inflationary process and its socio- economic effects clearly indicate that appropriate measures should be taken to control inflation in its early stage. If it is not checked in the beginning, it may develop into hyper-inflation with its dangerous effects on the economy. Since inflation is mainly caused by an excess of effective demand for goods and services at the full employment level as compared to the available supply of goods and services, measures to control inflation involve reduction in the total demand on the one hand and increasing output on the other.

Broadly, the measures against inflation can be divided into :

(*a*) Monetary policy (*b*) Fiscal policy
(*c*) Direct controls (*d*) Other measures.

(A) Monetary Policy

Monetary policy is adopted, by the monetary authority or the central bank of a country to influence the supply of money and credit by changing interest rate structure and availability of credit.

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Various monetary measures to control inflation are explained below :

1. Increasing Bank Rate. Bank rate is the rate at which the central bank lends money to the commercial banks. An increase in the bank rate leads to an increase in the interest rate charged by commercial banks which, in turn, discourages borrowing by businessmen and consumers. This will reduce money supply with public and thus control the inflationary pressure.

2. Sale of Government Securities. By selling government securities in the open market, the central bank direct reduces the cash reserves of the commercial banks because the central bank must be paid from these case reserves. The fall in the cash reserves compels the banks to reduce their lending activities. This will reduce the money supply and hence the inflationary pressures in the economy.

3. Higher Reserve Ratio. Another monetary measure to check inflation is to increase the minimum reserve ratio. An increase in the minimum reserve ratio means that the member banks are required to keep larger reserves with the central bank. This reduces the deposits of the banks and thus limits their power to create credit. Restrictions on credit expansion will control inflation.

4. Selective Credit Control. The purpose of selective credit control measures is to influence specific type of credit while leaving other types of credit unaffected. Such selective measures are particularly important for developing economies in which, on the one hand, there is an increasing need for credit expansion for growth purposes, and, on the other hand, there is also need for checking inflationary tendencies. In such a situation, selective credit control measures can direct the flow of credit from unproductive and inflation-prone sectors towards the productive and growth oriented sectors.

The main selective credit control measures to control inflation are :

(*i*) **Consumer Credit Control.** This method is adopted during inflation to curb excessive spending by consumers. In advanced countries, most of the durable consumer goods, such as, radio, T.V., Fridge, etc.; are purchased by the consumers on instalment credit. During inflation, loan facilities for instalment buying are reduced to minimum to check consumption spending. This is done by (*a*) raising the initial payment, (*b*) covering the large number of goods, and (*c*) reducing the length of the payment period.

(*ii*) **Higher Margin Requirements.** Margin requirement is the difference between the market value of the security and its maximum loan value. A bank does not advance loan equal to the market value of the security, but less. For example, it may lend Rs. 600 against the security worth Rs.1000; thus the margin requirement in this case is 40%. During inflation, the margin requirement can be raised to reduce the loan one can get on a security.

Limitations of Monetary Policy. During inflation, a dear money policy is recommended which aims at restricting the credit creation activities of the commercial banks.

But such an anti- inflationary policy suffers from many limitations :

(*i*) Prof. Galbraith mentions three reasons for the ineffectiveness of the dear money policy during inflation : (*a*) In times of high earnings, *i.e.*, when the marginal efficiency of capital is high, both long as well as short period investments become relatively insensitive to changes in interest rates, (*b*) The government generally fails to come to grips with real investment. (*c*), Very often, the monetary policy applied is so soft that it has little impact on inflation.

(*ii*) Excess reserves possessed by the commercial banks can make the monetary measures of the central bank to control inflation ineffective. Excess reserves enable the bank to lend more credit even when the credit control measures have been adopted by the central bank.

(*iii*) Monetary measures alone will not be sufficient when there exist cost- push inflationary pressures. Along with monetary policy, the fiscal policy and income policy are also needed.

(*iv*) If the inflationary rise in prices are due to scarcity of output, then the monetary policy will not be of much use. In this case, an appropriate output policy is required.

(*v*) Monetary policy will also not help in controlling inflation if the inflation is due to deficit financing.

(*vi*) In the modern economics, large amounts of near moneys (in the form of securities, bonds, etc.) are in existence, which are highly liquid in nature. In such circumstances, it is not so easy to control the rate of spending merely by controlling the money supply. There is no direct relationship between money supply and the price level.

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In short, however, judicious use of monetary policy as a secondary measure has an important role in checking inflationary pressures. The greatest merit of monetary policy is its flexibility. Monetary restrictions, along with other measures, are necessary to quickly and efficiently control inflation.

(B) Fiscal Policy

Fiscal policy is the budgetary policy of the government relating to taxes, public expenditure, public borrowing and deficit financing.

The major anti-inflationary fiscal measures include :

(1) increase in taxation
(2) reduction in public expenditure
(3) increase in public borrowing
(4) control of deficit financing.

1. Increase in Taxation. Anti-inflationary tax policy should be directed towards restricting demand without restricting production. Excise duties and sales tax on various goods, for example, take away the buying power from the consumer goods market without discouraging the expanding productive capacity of the economy. Some economists, therefore, prefer progressive direct taxes because such taxes on the one hand, reduce the disposable income of the people and, on the other hand, are justified on the basis of social equity.

2. Reduction in Public Expenditure. During inflation, effective demand is very high due to expansion of public and private spending. In order to check unregulated private spending, the government should first of all reduce its unproductive expenditure. In fact, during inflation, at the full employment level, the effective demand in relation to the available supply of goods and services is reduced to the extend that government expenditure is curtailed. Public expenditure being autonomous, an initial reduction in it will lead to a multiple reduction in the total expenditure of the economy. But, there are certain limitations of this measure : (*a*) It is not possible to reduce public expenditure related to defence needs particularly during war times. (*b*) Heavy reduction in government expenditure may come into clash with the planned long-run investment programmes in a developing economy.

3. Public Borrowing. Public borrowing is another method of controlling inflation. Through public borrowing, the government takes away from public excess purchasing power. This will reduce aggregate demand and hence the price level. Ordinarily public borrowing is voluntary, left to the free will of individuals. But voluntary public borrowing may not bring to the government sufficient funds to effectively control the inflationary pressures. In such conditions, compulsory public borrowing is necessary. Through compulsory public borrowing a certain percentage of wages or salaries is compularily deducted in exchange for saving bonds which become redeemable after a few years. In this way, purchasing power can be curtailed for a definite period to curb inflation. Compulsory public borrowing has certain limitations. (*a*) It involves the element of compulsion on the public. (*b*) It results in frustration if the government borrows from the poorer sections of the public who cannot contribute to this scheme. (*c*) The government should avoid paying back the past loans during inflationary period, otherwise it will generate further inflation.

4. Control of Deficit Financing. Deficit financing means financing the deficit budget (*i.e.* excess of government expenditure over its revenue) through printing of new currency. In order to control inflation, the government should minimise deficit financing. The important thing is that, as far as possible, the deficit should be financed through saving or taxation. The government can sell bonds to non-bank investors, like insurance companies, saving banks etc., which will take away the spending power from the public and thus curb inflation.

Limitation of Fiscal Policy. Fiscal policy, as an anti- inflationary policy, also has certain limitations: (*a*) Through fiscal measures, various welfare schemes are curtailed to control inflation which adversely affect the poor people. (*b*) For the proper implementation of the fiscal policy, efficient administration is needed which is normally found lacking. (*c*) For fiscal measures to become effective, stable political set up, political will of the government and public cooperation are required. (*d*) Even if these limitations are removed, fiscal policy alone is not sufficient . What is, in fact, needed is the proper coordination of fiscal and monetary measures for controlling inflation.

(C) Direct Controls

Direct controls refer to the regulatory measures undertaken with an objectives of converting an open inflation into a suppressed one.

Direct control on prices and rationing of scarce goods are the two such regulatory measures.

1. Direct Controls on Prices. The purpose of price control is to fix an upper limit beyond which the price of particular commodity is not allowed and to that extent inflation is suppressed.

2. Rationing. Control When the government fixes the quota of certain goods so that each person gets only a limited quantity of a the goods, it is called rationing. Rationing becomes necessary when the essential consumer goods are relatively scarce. The purpose of rationing is to divert consumption from those goods whose supply needs to be restricted for some special reason, *e.g.*, to make such commodities available to a large number of people. According to **Kurihara,** ***"rationing should aim at diverting consumption from particular articles whose supply is below normal rather than at controlling aggregate consumption."*** Thus, rationing aims at achieving the twin objectives of price stability and distributive justice.

Limitations of Direct Controls. Various limitations of direct controls are mentioned below :

(*i*) Direct controls suppress individual initiative and enterprise:

(*ii*) They discourage innovations, *i.e.*, new techniques and new products.

(*iii*) They encourage speculative tendencies and create artificial scarcity through large-scale hoardings. If it is expected that a particular commodity is going to be rationed due to scarcity, people tend to hoard large stocks of it, thus making it more scarce.

(*iv*) The implementation of direct controls need efficient and honest administrative mechinery. Generally, direct controls lead to evils like black marketing, corruption, etc.

(*v*) As soon as direct controls are removed, great economic disturbance appears.

(*vi*) Direct controls have limited applicability. They are considered useful when applied to specific scarcity areas and in extraordinary emergency situations. Serious objections are raised against direct controls during peace time.

(*vii*) According to Keynes, "rationing involves great deal of waste, both of resources and of employment."

Despite these shortcomings, direct controls are considered superior to monetary and fiscal measures. They seem inevitable in modern times to contain inflationary pressures in the economy because of the following reasons : (*a*) They can be applied easily and quickly and hence they produce rapid effects. (*b*) They are more selective and discriminatory than monetary and fiscal controls. (*c*) There can be variations in the intensity of operations of direct controls from time to time and in different sectors.

(D) Other Measures

Besides monetary, fiscal and direct measures, there are some other measures which can be taken to control inflation :

1. Expansion of Output. Inflation arises partly due to inadequacy of output. But, it is difficult to increase output during inflationary period because the productive resources have already been fully utilised. Under such condition when output as a whole cannot be increased, steps should be taken to increase output of those goods which are sensitive to inflationary pressures. This requires reallocation of resources from the production of less inflation-sensitive goods (*i.e.*, luxury goods) to the production of more inflation-sensitive goods (*i.e.* food, clothing and other essential consumer goods). Such reallocation of resources will keep the prices of essential consumer goods under check by raising their output.

2. Proper Wage Policy. In order to check inflation, it is necessary to control wages and profits and to adopt appropriate wage and income policy. Ceiling on wages and profits keep down disposable income and check the cost push inflation. Wage increase should be allowed to the workers only if their productivity increases ; in this way, higher wages will not lead to higher costs and hence higher prices.

3. Encouragement to Saving. Increase in private savings has dis- inflationary impact on the economy. Private savings lead to the reduction of spendable income of the people, which in turn, curtail inflationary pressures. The government should therefore take steps to encourage private savings.

4. Overvaluation. Overvaluation of domestic currency in terms of foreign currencies also serves to control inflation in three ways ; (*a*) It will discourage exports and thus increase the availability of goods and services in the domestic market. (*b*) It will encourage imports from abroad and thus add to the domestic stock of goods and services. (*c*) by reducing the prices of foreign materials which are needed in domestic production, it will control the upward cost-price spiral.

5. Population Control. In an overpopulated country, like India, the measures to check the growth of population also produce anit- inflationary effects. Effective family planning programmes ultimately reduce the increasing pressures on general demand for goods and services, thus helping to keep the rising prices under control.

6. Indexing. Economists also suggest indexing as an anti- inflationary measure. Indexing refers to monetary corrections by periodic adjustments in money incomes of the people and in the value of financial assets, saving deposits, etc., held by the public in accordance with changes in the prices. For example, if the annual price rise is 10% the money incomes and the value of financial assets should be increased by 10% under the system of indexing.

The above discussion leads to the conclusion that a proper anit- inflationary policy should be comprehensive. It should involve all types of measures and should not exclusively depend upon one measure or the other. The problem of inflation must be attacked from all sides with determined efforts.

9. DEFLATION

Deflation is the opposite of inflation. Just as inflation is a phenomenon of rising prices, deflation is a phenomenon of falling prices. In the words of **Crowther**, ***"Deflation is that state of the economy where the value of money is rising or the prices are falling."*** No doubt deflation is associated with falling prices, but it is not that each and every fall in price will be termed as deflation. Only those falls in prices which result in unemployment, overproduction and fall in the economic activity are deflationary. In short, deflation is a situation in which falling prices are accompanied by falling levels of employment, output and income.

Deflation, Disinflation, Inflation and Reflation

It is important to understand the distinction between four types of situations, *i.e.*, deflation, disinflation, inflation and reflation :

Deflation and Disinflation

Deflation is different from disinflation. While deflation refers to a situation of general depression and widespread unemployment caused by insufficiency of effective demand, disinflation is a process of reversing inflation without creating unemployment or reducing output. In fact, disinflation is an attempt aiming at reducing the prices when they are abnormally high.

Deflation and disintlation resemble each other because (*a*) in both cases, money supply decreases and (*b*) both lead to a fall in the price level. But, despite this similarity, there are some basic differences between the two situations : (*a*) Deflation causes a serious problem of mass unemployment and reduction in output in the economy, while disinflation does not create such problem ; it rather saves the economy from the ruinous effects of inflation. (*b*) While deflation may be due to certain natural causes or it may be the result of a deliberate policy of the government, but disinflation is always the direct result of a deliberate policy of the government. (*c*) Deflation occurs before the level of full employment, whereas disinflation occurs after the level of full employment. (*d*) The prices can be brought down to the normal level with the help of disinflation. But deflation may reduce the prices even below the normal level. In fac□t, there is no limit to the falling prices during deflation.

Inflation and Reflation

Inflation is different from reflation in exactly the same manner as deflation is different from disinflation. Inflation is a situation of rising prices after the full-employment level is reached. In other words, it is a phenomenon of rising prices without any increase in output and employment. Reflation, on the other hand, is a situation of moderately rising prices when attempts are made to pull the system out of depths of depression. In the words of **G.D. H. Cole**, ***"Reflation may be defined as inflation deliberately undertaken to relieve a depression."***

Inflation and reflation resemble each other in two respects : (*a*) In both, money supply increases. (*b*) Both lead to a rise in the price level. But still there are some basic differences between inflation and