CHAPTER 15

Inflation

The term inflation generally means a situation of rising prices of goods, which lowers the purchasing power of money. It is a situation in which either the prices or the supply of money are rising because in reality both will rise together. In the Keynesian sense, true inflation commences when the supply of goods and services is unresponsive to changes in money supply. *Too much money chasing too few commodities is termed as inflation.* Inflation is a persistent and appreciable rise in the general price level. *The rate of inflation is defined as the rate of change of the price level as measured by the consumer price index (CPI)*

$$\text{Rate of inflation in } t^{\text{th}} \text{ period} = \frac{\text{Price level } (t^{\text{th}} \text{ year})(t-1^{\text{th}} \text{ year})}{\text{Price level } (t-1^{\text{th}} \text{ year})}.$$

Price Indices

A price index is a weighted average of individual prices, where the weight of an each commodity's price reflects the economic importance of that commodity. The most important price indices are consumer price index, the producer price index and the GNP deflator.

Consumer Price Index [CPI]

It is the most widely used measure of inflation, which is estimated based on prices of food items, clothing, shelter, fuel, medical care, transportation and other commodities purchased for day-to-day living.

Coming to the estimation of price index numbers, weights are given to different prices. Price indices are constructed by weighing each price by the economic importance of the commodity. In the case of CPI, each item is assigned a fixed weight proportional to its relative prices in consumer expenditure budgets.

The construction of CPI can be explained with the following example, CPI constitutes many items but for simplicity, we confine to only three commodities. Let us assume that a hypothetical budget survey in 1995 reveals that consumers spend 50 per cent of their income on food, 25 per cent on shelter and 25 per cent on health and others. The year 1995 becomes the base year and the price of each commodity is set at 100. The CPI for 1995 is therefore 100 *i.e.*, (0.50 × 100) + 0.25 × 100) + (0.25 × 100). Calculation of CPI say for the 1996 gives the rate of inflation. Let us assume that the prices of food, shelter and medical care rise by 3, 5 and 6 per cent respectively. The

indices for these three items are 103, 105 and 106. Now the CPI for 1996 is calculated as follows:

$$\text{CPI for 1996} = (0.50 \times 103) + (0.25 \times 105) + (0.25 \times 106) = 104.25$$

Making use of CPI in 1995 and 1996, we can workout the rate of inflation in 1996

$$\text{Rate of inflation} = \frac{(104.25 - 100)}{100} \times 100.$$

$$= 4.25 \text{ per cent per year.}$$

The Producer Price Index (PPI)

It measures the level of prices of food items, manufactured products, mining products, *etc.*, at producer or wholesaler stage.

GNP Deflator

It is the ratio of nominal GNP to real GNP which can be interpreted as a comprehensive price index.

Inflation and Other Forms

1. *Deflation:* Opposite to inflation is deflation, which is found when the general level of prices is falling. It is a situation in which supply of money at a particular point of time is less than the demand.
   Pigou defined deflation as the state of falling prices, which occurs at the time when the output of goods and services increases more rapidly than the volume of money income in the economy.
2. *Reflation:* It refers to a moderate degree of controlled inflation.
3. *Disinflation:* It indicates the decline in the rate of inflation.
4. *Stagflation:* It is inflation accompanied by stagnation on the development. Stagflation is associated with high prices and high unemployment. It is a global phenomenon, as every country whether developed or developing, experiences stagflation.

Causes of Inflation

The causes of inflation can be broadly grouped into two categories.

1) *Factors Causing Increase in Demand*

a. Increase in money supply.
b. Increase in disposable income.
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 the producers and traders.
e. Increase in exports.
f. Increase in salaries, wages or dearness allowance.
g. Increase in population, *etc.*

2) *Factors Causing Decrease in Supply*

a. Deficiency of capital equipment.
b. Scarcity of other complementary factors of production.
c. Increase in exports.
d. Decrease in imports.
e. Hoarding by traders.
f. Natural calamities, *etc.*

Types of Inflation: Following are the various types of inflation:

1. *Suppressed Inflation:* Deliberate policies are adopted to prevent price rise, but the impact of these policies is only temporary, since prices rise as soon as these are relaxed. Here is a situation in which the Government does not tackle the factors causing inflation, it only imposes controls to check the price rise.
2. *Creeping Inflation:* It is the mildest type of inflation. A sustained rise of less than 3 per cent in prices per annum is called creeping inflation. It is not considered serious for the economy. The Government has sometimes resort to creeping inflation to enable the industry and trade to receive stimulus for the country to progress slowly and gradually.
3. *Walking Inflation:* When the rise in prices falls in the range of 3 per cent to 6 per cent, it is called walking inflation.
4. *Running Inflation:* When the sustained rise in prices is about 10 per cent per annum, it is called running inflation. This type of inflation is a cause of concern for the Government and warrants remedial measures.
5. *Galloping or Hyperinflation:* This is the most dangerous type of inflation and prices rise by 16 per cent or more per annum. This type of inflation should not be allowed to persist.
6. *Open Inflation:* Inflation is said to be open when the market forces are allowed to operate freely, for the prices of goods and services set without abnormal interruption by the authorities. The Government does not take any steps to check the rise in the prices.
7. *Suppressed or Repressed Inflation:* Suppressed inflation refers to a situation when, the Government actively intervenes to check the rise in the price level through the use of price control measures and rationing of scarce items in the economy.
8. *Comprehensive Inflation:* This type of inflation occurs when prices of all the commodities register a rise in the economy.
9. *Sporadic Inflation:* It is a sectoral inflation. Under this type of inflation only the prices of a few commodities show an upward trend.
10. *Demand Pull Inflation or Excess Demand Inflation:* It is often described as "too much money chasing too few goods". It occurs as a result of excessive demand for goods and services which pull prices upward.
11. *Demand-shift Inflation:* It is a special case of demand-pull inflation. This occurs when shifts take place in demand for different goods and services with total demand remaining unchanged. This arises as a result of households reducing the demand for good A, while increasing demand for B, by an equal rupee amount.
12. *Cost-push Inflation:* Enforcement of wage increase by unions and increase of profits by employers lead to cost push inflation. Here the money wages rise more rapidly than the productivity of labour, as a result of which the cost of production of commodities rises, employers, in turn increase the prices of the

commodities. Higher wages enable workers to buy as much as before, even in the light of higher prices. On the other hand unions demand higher wages in view of higher prices. In this way, the wage cost spiral continues leading to cost-push inflation to prevail.

13. *Mixed Demand-pull and Cost-push Inflation:* This situation is termed as hybrid form of inflation. It is a situation in which some elements of demand-pull inflation and cost-push inflation are found. In reality excess demand and cost-push forces operate simultaneously and interdependently in an inflationary process. In years of poor harvest the prices of agricultural commodities rise as the demand is more than supply. The rise in the price of farm commodities causes the cost of living index to increase as farm commodities carry substantial weights. In view of rise in the cost of living index, wages rise in industries causing cost-push inflation.

    On the other hand, if demand for products of an industry rises, as a result of excessive demand the price rise brings in more profits to the industry. The higher profits stimulate the industry to expand the production by employing more labour which in turn push up the wages. The result is the prevalence of a situation of wage-cost inflation.

14. *Markup Inflation:* This type of inflation prevails when gigantic business organisations adopt a peculiar method of pricing. They work out the production costs and then add a certain mark-up to get targetted rate of profit on their capital investment. This mark-up is generally on the higher side.

15. *Profit Induced Inflation:* Some times it happens in the economy that production cost declines as a result of which prices also tend to decline. But the Government does not allow the prices to fall down by resorting to artificial means. The Government intervention neither allows the prices to rise nor allow them to fall down. This action of the Government results in an increase in the profits of the producers.