

[Academic Script]

Inflation and Unemployment

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Inflation, Unemployment

and The Phillips Curve

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Inflation and Unemployment

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1. Introduction

Inflation is a very common problem that is affecting most countries of the world today. Developed as well as developing countries suffer from inflation. There are many causes of inflation, and they also differ from country to country. Each country devises a set of measures to fight inflation. In the current scenario Inflationary tendencies are growing steadily in India, causing the cost of living to rise. Middle class and poor people suffer the most due to inflation.

Definition

By inflation we mean a general rise in prices. Theoretically, inflation is a persistent rise in the general price level rather than a once for all rise in it.

2. Causes of Inflation

Depending upon the specific causes four types of inflation have been distinguished-

- 1. Demand pull inflation
- 2. Excessive growth in money supply
- 3. Cost push inflation
- 4. Structural inflation

An important cause of inflation is the excessive growth of money supply in the economy.

Demand pull inflation: Demand pull inflation where the basic factor at work is the increase in AD for output 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.

Keynes explained that inflation arises when there occurs an inflationary gap which is caused by a situation where by the pressure of AD for goods and services exceeds the available supply of output. In such a situation the rise in price level is the natural occurrences. The ordinary functioning of an economy should result in distributing and spending income in such a manner that AD for output is equivalent to the cost of producing total output including profits and taxes.

The AD increases when all the three sectors i.e. government, the entrepreneurs and the households try to secure a larger part of output than there will be a demand-pull in the economy. Thus, other sectors as well try to secure as much as they can from the share of output used by any one sector, resulting in creation of multiple demands in all of the sector together. Thus, there is more demand than the national output produced. When AD for all purposes- consumption, investment & government expenditure exceeds the supply of goods at current prices, there is a rise in prices.

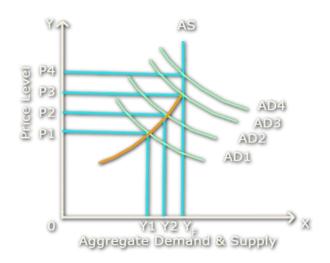
This can be best explained when the government adopts expansionary fiscal policy under which it increase its expenditure on education, health, etc. This will lead to increase in AD if AS of output does not increase by relatively less amount in the short run this will cause demand pull inflation in the economy i.e. general rise in price level from one period to another.

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 are willing to contract their investment or consumption by the amount of these additional resources used by the government an inflationary process will be initiated.

Keynes notion of inflationary gap represented excess of AD over full employment output. This inflationary gap according to him leads to rise in prices. Thus Keynes explained inflation in terms of demand pull forces. Since beyond full employment level of AS output cannot increase in demand. This results in rise in prices under the pressure of excess demand. Demand pull inflation can be represented with AD & AS curves. Considering the figures in which AD & AS are measured along the x-axis & general price level along the y-axis. Curve AS represents AS which rises upward in the beginning but when full employment level of AS, OY_F is reached AS takes a vertical shape.

Figure:



This is because Keynes believed that after the full-employment level AS curve becomes constant and there cannot be any additional supply. Thus, below AD_3 economy operates at below full employment and at AD_3 economy achieves full-employment hence supply curve becomes vertical straight line. In the figure when aggregate demand increases from AD_1 to AD_2 a general increase in the price level is observed. Hence proving that as the demand increases general price level is pulled up.

Monetarist theory of inflation: The modern monetarist, Milton Friedman explains inflation in terms of excess demand for goods and services. The difference between the monetarist view of demand pull inflation & Keynesian view is Keynes explained inflation as arising out of real sector forces. In this model of inflation excess demand comes into being as a result of autonomous increase in expenditure on investment or consumption. On the other hand, monetarists explain the emergence of excess demand and the resultant rise in prices on account of increase in money supply in the economy.

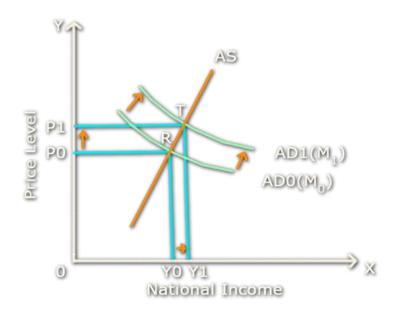
Friedman holds that when money supply is increased in the economy, then there emerges an excess supply of real money balances with the public over the demand for money. This disturbs the equilibrium. In order to restore the equilibrium, the public will reduce the money balances by increasing money expenditure on goods & services. Thus, according to Friedman & other modern quantity theorists, the excess supply of real monetary balances results in the increase in AD for goods and services. If there is no proportionate increase in output, then extra money supply leads to excess demand for goods & services. This cause inflation or rise in prices. The whole argument can be presented in the following scheme

$M^{S} > kPY = RESULTS AD \rightarrow P$

When the supply of money (M^S) is increased, it creates excess supply of real cash balances. P is price level and kY is demand level. This excess supply of real money balance leads to the rise in AD which further leads to rise in Price.

It thus follows that when money supply increases it causes disturbance in the equilibrium. This leads to the increase in AD or expenditure on goods & services which will lead to the increase in nominal NI. They further argue that the real NI remains stable at full employment level in the long run due to the flexibility of wages. Therefore according to Friedman and his followers in the long run, the increase in nominal NI brought about by the expansion in money supply and resultant increase in AD will cause a proportional increase in the price level. However in the short run like the Keynesians, they believe that the economy may be working at less than full employment i.e. in the short run there may prevail excess capacity and unemployment of labour so that expansion in money supply & consequently increase in nominal income partly expansion in real income & partly results in the price level as shown in the fig. To what extent price level increase depends upon the elasticity of supply or aggregate output.

Figure.



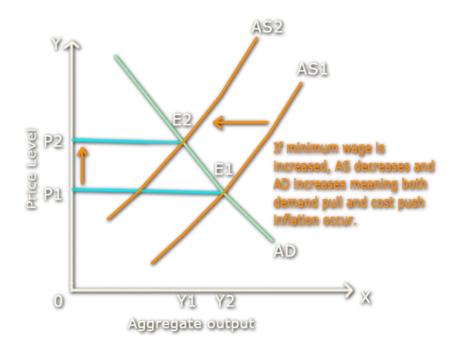
It is noticed from the fig. that effect of increase in money supply from M_0 to M_1 and resultant increase in AD curve for goods and services from AD_0 to AD_1 is split up into the rise in price level from $(P_0$ to $P_1)$ and the increase in real income or aggregate output $(Y_0$ to $Y_1)$.

It is thus believed that in short run, full employment of labour and other resources may not prevail due to recessionary conditions & therefore they admit the possibilities of increase in output. But they emphasise, that when the growth in money supply is greater than the growth in output, the result is excess demand for goods and services which causes rise in prices on demand pull inflation.

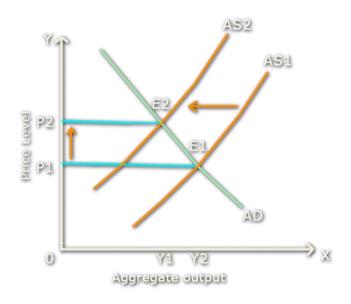
Cost-push inflation: This type of inflation emanates from changes which arise on the side of supply or cost of production, independently of any excess demand in both final goods and factor markets. As the level of unemployment decrease certain income group may put pressure to seek money income. E.g. producers may seek higher real profit margins & the trade unions may exert pressure for increasing the wage rates. We thus have cost push inflation due to-

- a) wage-push
- b) profit-push

a) Wage Push: The market power of factor inputs is increased when resources are fully employed. But even in a situation of less than full employment, the fact that the government is committed to full employment may encourage employee's organizations, if well organized to press pay increase claims aggressively. Mostly justifiable on the grounds of a prior rise in productivity or of cost of living they produce a cost push effect. Since rates of wages are negotiated collectively for an industry, the cost of all firms in the industry rise owing to the increase in wage rates. Other industries also follow suits and therefore costs rise throughout the economy and are regrouped in higher prices. This increase provide additional purchasing power and so the level of AD increases further. If this happens we have cost push inflation. It may be noted that as a result of cost-push effect of higher wages AS curve of output shifts to the left & given the AD curve this results in higher price of output.



b) Profit Push Inflation: Besides the increase in wages of labour without any increase in its productivity, there is another factor responsible for cost push inflation. This is the increase in the profit margin by the firms working under monopolistic or oligopolistic conditions and as a result charging higher prices from the consumers. In the former case when the cause of cost push inflation is the rise in wages it is called wage push inflation and in the later case when the cause of cost push inflation is the rise in profit margins, it is called profit push inflation. The increase in profit margins also produces a cost push effect & results in shift in the AS curve to the left.



3. Unemployment

Unemployment is yet another major concern of growing economies like India after inflation. It represents the unused labour force within an economy, and hence an important resource is wasted due to inability to use it. There are various types of unemployment, which are important to be noticed in order to diagnose it correctly.

Frictional unemployment: Frictional Unemployment is always present in the economy, resulting from temporary transitions made by workers and employers having inconsistent or incomplete information. This type of unemployment is closely related to structural unemployment due to its dependence on the dynamics of the economy. This type of unemployment is also caused by failing firms, poor job performance, or obsolete skills. Frictional unemployment can be seen as a transaction cost of trying to find a new job. For instance, a case of frictional unemployment would be a college student quitting their fast-food restaurant job to get ready to find a job in their field after

graduation. Unlike structural unemployment this process would not be long due to skills the fresh college graduate has to offer a potential firm.

Seasonal Unemployment: Seasonal unemployment is a working agreement where the worker is employed for a certain part of the year, however after that time of the year has passed then the worker is left unemployed. For example, summer tourism jobs, beach lifeguards, peasant farmers. Furthermore, people who are also construction workers who only work when house building jobs are available.

Disguised unemployment: If a person does not contribute anything in the production process or in other words, if he can be removed from the work without affecting the productivity adversely, he will be treated as disguisedly unemployed. The marginal productivity of such unemployed person is zero. Agriculture sector of underdeveloped/developing economics possess this type of unemployment at a large scale.

Technological unemployment: Technological Unemployment is when there is a lack of jobs or when people lose their jobs due technological changes. People are replaced by capital goods and machinery because sometimes it makes the job easier and also quicker. Furthermore, it also makes the cost of labor and productivity less expensive which would make the firms earn more profit. This could potentially cause deflation because the prices would have fallen due to the increase of supply. Due to the change in technology, the productivity rate has increased but the employment rate is decreasing.

Structural unemployment: Structural Unemployment is associated with the mismatch of jobs and workers due to the lack of skills or simply the wrong area desired for work. Structural unemployment depends on the social needs of the economy and dynamic changes in the economy.

For instance, advances in technology and changes in market conditions often turn many skills obsolete; this typically increases the unemployment rate. For example, with the rise of computers, many jobs in manual book keeping have been replaced by highly efficient software. Workers who find themselves in this situation find that they need to acquire new skills in order to obtain a new job.

Cyclical unemployment: Unemployment that is attributed to economic contraction is called cyclical unemployment. The economy has the capacity to create jobs which increases economic growth. Therefore, an expanding economy typically has lower levels of unemployment. On the other hand, according to cyclical unemployment an economy that is in a recession faces higher levels of unemployment. When this happens there are more unemployed workers than job openings due to the breakdown of the economy. This type of unemployment is heavily concentrated on the activity in the economy.

4. Summary

So friends today we had a thorough introduction of Inflation in which we learnt about causes of inflation that influence various types of inflation like Demand – Pull inflation and Cost-push

Inflation. We also learnt about various types of unemployment.
Hope you enjoyed today's session.