

Inflation

Inflation may be defined as 'a sustained upward trend in the general level of prices' and not the price of only one or two goods. G. Ackley defined inflation as 'a persistent and appreciable rise in the general level or average of prices'. In other words, inflation is a state of rising prices, but not high prices.

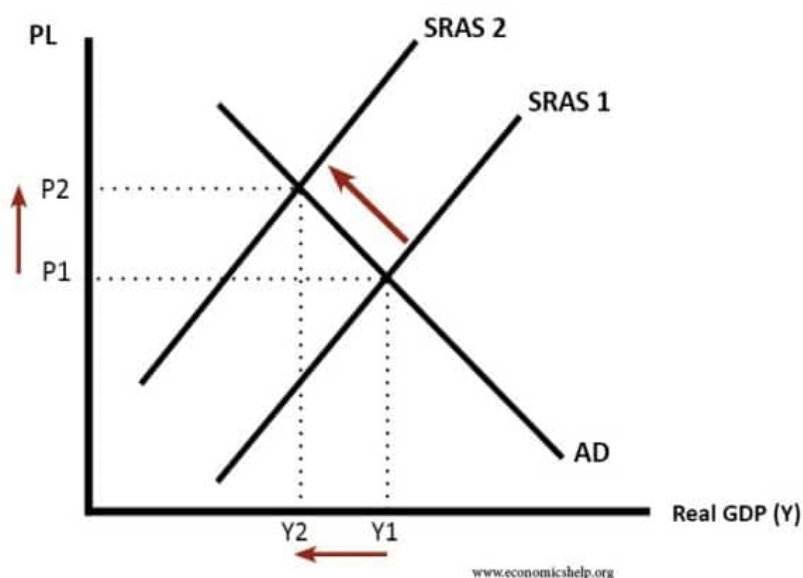
As inflation is a state of rising prices, deflation may be defined as a state of falling prices but not fall in prices. Deflation is, thus, the opposite of inflation, i.e., a rise in the value of money or purchasing power of money. Disinflation is a slowing down of the rate of inflation.

Types of Inflation:

1. Cost-Push Inflation:

Cost-push inflation occurs when we experience rising prices due to higher costs of production and higher costs of raw materials. Cost-push inflation is determined by supply-side factors, such as higher wages and higher oil prices. Cost-push inflation is different to demand-pull inflation which occurs when aggregate demand grows faster than aggregate supply. Cost-push inflation can lead to lower economic growth and often causes a fall in living standards, though it often proves to be temporary.

Diagram Showing Cost-Push Inflation

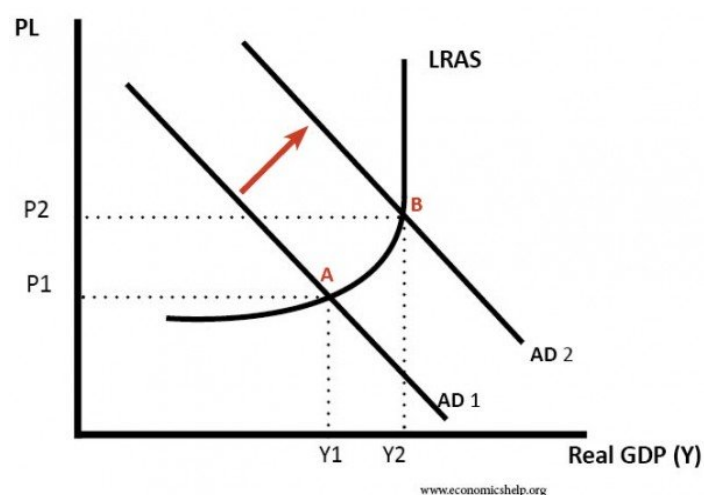


Short-run aggregate supply curve shifts to the left, causing a higher price level and lower real GDP.

Causes of Cost-Push Inflation:

- **Higher Price of Commodities.** A rise in the price of oil would lead to higher petrol prices and higher transport costs. All firms would see some rise in costs. As the most important commodity, higher oil prices often lead to cost-push inflation (e.g. 1970s, 2008, 2010-11)
- **Imported Inflation.** Devaluation will increase the domestic price of imports. Therefore, after devaluation, we often get an increase in inflation due to rising cost of imports.
- **Higher Wages.** Wages are one of the main costs facing firms. Rising wages will push up prices as firms have to pay higher costs (higher wages may also cause rising demand)
- **Higher Taxes.** Higher VAT and Excise duties will increase the prices of goods. This price increase will be a temporary increase.
- **Profit-push inflation.** If firms gain increased monopoly power, they are in a position to push up prices to make more profit.
- **Higher Food Prices.** In western economies, food is a smaller percentage of overall spending, but in developing countries, it plays a bigger role. (food inflation)

2. **Demand-pull Inflation:** Demand-pull inflation is a period of inflation which arises from rapid growth in aggregate demand. It occurs when economic growth is too fast.



If the aggregate demand (AD) rises faster than the productive capacity (LRAS), then the firms will respond by putting up prices, creating inflation.

How demand-pull inflation occurs

If aggregate demand is rising at 4%, but productive capacity is only rising at 2.5%; firms will see demand outstripping supply. Therefore, they respond by increasing prices.

Also, as firms produce more, they employ more workers, creating a rise in employment and fall in unemployment. This increased demand for workers puts upward pressure on wages, leading to wage-push inflation. Higher wages increase the disposable income of workers leading to a rise in consumer spending.

Causes of demand-pull inflation

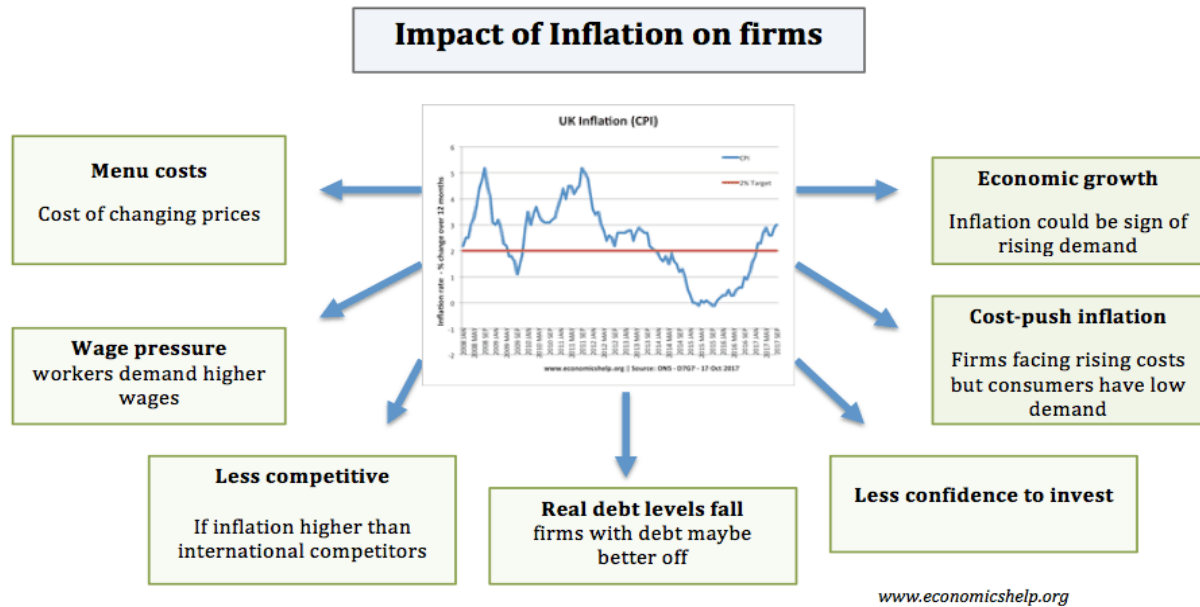
- **Lower interest rates.** A cut in interest rates causes a rise in consumer spending and higher investment. This boost to demand causes a rise in AD and inflationary pressures.
- **Rising real wages.** For example, unions bargaining for higher wage rates.
- **Devaluation.** A depreciation of the exchange rate which makes exports more competitive in overseas markets leading to an injection of fresh demand into the circular flow and a rise in national income and demand for factor resources – there may also be a positive multiplier effect on the level of demand and output arising from the initial boost to export sales.
- **Higher demand from a government (fiscal) stimulus** e.g. via a reduction in direct or indirect taxation or higher government spending and borrowing. If direct taxes are reduced, consumers will have more disposable income causing demand to rise. Higher government spending and increased borrowing feeds through directly into extra demand in the circular flow.
- **Monetary stimulus to the economy:** A fall in interest rates may stimulate too much demand – for example in raising demand for loans or in causing rise in house price inflation.
- **Faster economic growth in other countries** – providing a boost to exports overseas.

Types of Inflation by Rate of Increase

- **Creeping inflation (1-4%)**
 - When the rate of inflation slowly increases over time. For example, the inflation rate rises from 2% to 3%, to 4% a year. Creeping inflation may not be immediately noticeable, but if the creeping rate of inflation continues, it can become an increasing problem.
- **Walking inflation (2-10%)**
 - When inflation is in single digits – less than 10%. At this rate – inflation is not a major problem, but when it rises over 4%, Central Banks will be increasingly concerned. Walking inflation may simply be referred to as moderate inflation.
- **Running inflation (10-20%)**
 - When inflation starts to rise at a significant rate. It is usually defined as a rate between 10% and 20% a year. At this rate, inflation is imposing significant costs on the economy and could easily start to creep higher.
- **Galloping inflation (20%-1000%)**
 - This is an inflation rate of between 20% up to 1000%. At this rapid rate of price increases, inflation is a serious problem and will be challenging to bring under control. Some definitions of galloping inflation may be between 20% and 100%. There is no universally agreed definition, but hyperinflation usually implies over 1,000% a year.
- **Hyperinflation (> 1000%)**
 - This is reserved for extreme forms of inflation – usually over 1,000% though there is no specific definition. Hyperinflation usually involves prices changing so fast, that it becomes a daily occurrence, and under hyperinflation, the value of money will rapidly decline.

Effects of Inflation

Effects on business



A rise in inflation is likely to mean a rise in the cost of raw materials. Also, workers are likely to demand higher wages to cope with the higher cost of living. This rise in prices can also cause greater volatility and uncertainty. With firms uncertain about future costs, they may hold back from making investment decisions. Firms generally prefer a low and stable inflation rate.

Also, with an inflation rate, firms may expect rising interest rates, which will increase cost of borrowing – another reason to hold back on investment.

With higher inflation, firms may face menu costs (the cost of changing and updating prices). However, with modern technology this cost has diminished in importance – as it is easier for firms to update prices automatically.

Effects on consumers

Rising prices reduce consumer's real income, leading to a fall in consumption and thus, a fall in consumer welfare. With rising prices, consumers may be more inclined to try and purchase more quickly before prices rise further. It could lead to costs of consumers looking around different shops comparing prices (this is known as shoe leather costs). However, for moderate rises in inflation, this is unlikely to be too serious. Also, the internet and price comparison sites can make it easier to compare prices.

Effect on Central Bank and interest rates

Most Central Banks have an inflation target of around 2%. Therefore, if inflation rises above the target, they may feel the need to increase interest rates. Higher interest rates will increase borrowing costs and slow down the rate of investment and economic growth. Lower economic growth will lead to lower demand-pull inflation (though there can be time-lags).

However, it is possible, that Central Banks respond to higher inflation by keeping interest rates the same. If inflation was due to cost-push factors and economic growth was low – the Bank may feel it would be inappropriate to raise interest rates.

Effect on savers

For savers with cash under the bed or receiving fixed interest payments, a higher inflation rate could reduce the real value of their savings. For example, if bond holders buy government bonds with interest rate of 3% and anticipated inflation of 2% – then they expect a real interest rate of 1%. However, if inflation rises to 7% and their interest rate stays at 3%, their effective real interest rate is 4% – in this case, their savings reduce in value.

Effect on workers

Higher inflation will raise the cost of living. The impact on workers depends on what happens to nominal wages. For example, if inflation is caused by rising demand and falling unemployment, firms are likely to raise wages to keep attracting workers. In this case, workers' real wages will continue to rise.

Effect on the exchange rate

If inflation in India rises faster than her international competitors, the Indian goods will become relatively uncompetitive leading to lower demand for Indian goods and for Rupee. This will cause depreciation in the exchange rate.

Effect on economic growth

The effect on economic growth is uncertain. Sometimes inflation is caused by a rapid rate of economic growth. However, if growth is above the long-run trend rate – this may not be sustainable – especially if interest rates rise. Therefore,

higher inflation may be a sign the economic cycle is getting close to the end of the boom period and may be followed by a recession.

Measures to Control Inflation

The various methods are usually grouped under three heads: monetary measures, fiscal measures and other measures.

1. Monetary Measures:

Monetary measures aim at reducing money incomes.

(a) Credit Control:

One of the important monetary measures is monetary policy. The central bank of the country adopts a number of methods to control the quantity and quality of credit. For this purpose, it raises the bank rates, sells securities in the open market, raises the reserve ratio, and adopts a number of selective credit control measures, such as raising margin requirements and regulating consumer credit. Monetary policy may not be effective in controlling inflation, if inflation is due to cost-push factors. Monetary policy can only be helpful in controlling inflation due to demand-pull factors.

(b) Demonetisation of Currency:

However, one of the monetary measures is to demonetise currency of higher denominations. Such a measure is usually adopted when there is abundance of black money in the country.

(c) Issue of New Currency:

The most extreme monetary measure is the issue of new currency in place of the old currency. Under this system, one new note is exchanged for a number of notes of the old currency. The value of bank deposits is also fixed accordingly. Such a measure is adopted when there is an excessive issue of

notes and there is hyperinflation in the country. It is a very effective measure. But is inequitable for it hurts the small depositors the most.

2. Fiscal Measures:

Monetary policy alone is incapable of controlling inflation. It should, therefore, be supplemented by fiscal measures. Fiscal measures are highly effective for controlling government expenditure, personal consumption expenditure, and private and public investment.

The principal fiscal measures are the following:

(a) Reduction in Unnecessary Expenditure:

The government should reduce unnecessary expenditure on non-development activities in order to curb inflation. This will also put a check on private expenditure which is dependent upon government demand for goods and services. But it is not easy to cut government expenditure. Though this measure is always welcome but it becomes difficult to distinguish between essential and non-essential expenditure. Therefore, this measure should be supplemented by taxation.

(b) Increase in Taxes:

To cut personal consumption expenditure, the rates of personal, corporate and commodity taxes should be raised and even new taxes should be levied, but the rates of taxes should not be so high as to discourage saving, investment and production. Rather, the tax system should provide larger incentives to those who save, invest and produce more.

(c) Increase in Savings:

Another measure is to increase savings on the part of the people. This will tend to reduce disposable income with the people, and hence personal consumption expenditure. But due to the rising cost of living, people are not in a position to save much voluntarily.

3. Other Measures:

The other types of measures are those which aim at increasing aggregate supply and reducing aggregate demand directly.

(a) To Increase Production:

The following measures should be adopted to increase production:

One of the foremost measures to control inflation is to increase the production of essential consumer goods like food, clothing, kerosene oil, sugar, vegetable oils, etc. If there is need, raw materials for such products may be imported on preferential basis to increase the production of essential commodities.

(b) Rational Wage Policy:

Another important measure is to adopt a rational wage and income policy. Under hyperinflation, there is a wage-price spiral. To control this, the government should freeze wages, incomes, profits, dividends, bonus, etc.

But such a drastic measure can only be adopted for a short period as it is likely to antagonise both workers and industrialists. Therefore, the best course is to link increase in wages to increase in productivity.

(c) Price Control:

Price control and rationing is another measure of direct control to check inflation. Price control means fixing an upper limit for the prices of essential consumer goods.

Stagflation

Stagflation is a period of rising inflation but falling output and rising unemployment. It is often a period of falling real incomes as wages struggle to keep up with rising prices. Stagflation is often caused by a rise in the price of commodities, such as oil. Stagflation occurred in the 1970s following the

tripling in the price of oil. A degree of stagflation occurred in 2008, following the rise in the price of oil and the start of the global recession. Stagflation is difficult for policy makers. For example, the Central Bank can increase interest rates to reduce inflation or cut interest rates to reduce unemployment. But, they can't tackle both inflation and unemployment at the same time.

Causes of stagflation

- **Oil price rise** Stagflation is often caused by a supply-side shock. For example, rising commodity prices, such as oil prices, will cause a rise in business costs (transport more expensive) and short-run aggregate supply will shift to the left. This causes a higher inflation rate and lower GDP.
- **Powerful trade unions.** If trade unions have strong bargaining power – they may be able to bargain for higher wages, even in periods of lower economic growth. Higher wages are a significant cause of inflation.
- **Falling productivity.** If an economy experiences falling productivity – workers becoming more inefficient; costs will rise and output fall.
- **Rise in structural unemployment.** If there is a decline in traditional industries, we may get more structural unemployment and lower output. Thus, we can get higher unemployment – even if inflation is also increasing.
- **Supply shocks.** If there is disruption to supply chains, there prices will start rising. The supply shock will also cause decrease in unemployment. For example, in 2021, UK supply shocks caused moderate degree of stagflation.

Deflation

Deflation is generally the decline in the prices for goods and services that occur when the rate of inflation falls below 0%. Deflation will take place naturally, if and when the money supply of an economy is limited. Deflation in an economy indicates deteriorating conditions.

Deflation is normally linked with significant unemployment and low productivity levels of goods and services. The term “Deflation” is often mistaken with “disinflation.” While deflation refers to a decrease in the prices

of goods and services in an economy, disinflation is when inflation increases at a slower rate.

Causes of Deflation

Deflation can be caused by multiple factors:

Price Competition

When different companies selling similar goods or services compete, there is a tendency to lower prices to have an edge over the competition.

Increased productivity

Innovation and technology enable increased production efficiency which leads to lower prices of goods and services. Some innovations affect the productivity of certain industries and impact the entire economy.

Decrease in the supply of currency

The decrease in the supply of currency will decrease the prices of goods and services to make them affordable to people.

Effects of Deflation

Deflation may have the following impacts on an economy:

Reduction in Business Revenues:

In an economy faced with deflation, businesses must drastically reduce the prices of their products or services to stay profitable. As reductions in prices take place, revenues begin to drop.

Lowered Wages and Layoffs

When revenues begin to drop, businesses need to find means to reduce their expenses to meet objectives. One way is by reducing wages and cutting jobs. This adversely affects the economy as consumers would now have less to spend.