

UNIT - III

Inflation: Meaning - Types of Inflation - Causes of Inflation - Inflationary gap - Effects of inflation - Control of Inflation - Deflation: Meaning - Effects of Deflation

MEANING:

Inflation is the decline of purchasing power of a given currency over time. A quantitative estimate of the rate at which the decline in purchasing power occurs can be reflected in the increase of an average price level of a basket of selected goods and services in an economy over some period of time. The rise in the general level of prices, often expressed as a percentage means that a unit of currency effectively buys less than it did in prior periods.

Inflation can be contrasted with deflation, which occurs when the purchasing power of money increases and prices decline.

- Inflation is the rate at which the value of a currency is falling and consequently the general level of prices for goods and services is rising.
- Inflation is sometimes classified into three types: Demand-Pull inflation, Cost-Push inflation, and Built-In inflation.
- Most commonly used inflation indexes are the Consumer Price Index (CPI) and the Wholesale Price Index (WPI).
- Inflation can be viewed positively or negatively depending on the individual viewpoint and rate of change.
- Those with tangible assets, like property or stocked commodities, may like to see some inflation as that raises the value of their assets.
- People holding cash may not like inflation, as it erodes the value of their cash holdings.
- Ideally, an optimum level of inflation is required to promote spending to a certain extent instead of saving, thereby nurturing economic growth.

TYPES OF INFLATION

Creeping Inflation

Creeping or mild inflation is when prices rise 3% a year or less. According to the Federal Reserve, when prices increase 2% or less, it benefits economic growth. This kind of mild inflation makes consumers expect that prices will keep going up. That boosts demand. Consumers buy now to beat higher future prices. That's how mild inflation drives economic expansion. For that reason, the Fed sets 2% as its target inflation rate.¹

Walking Inflation

This strong, or destructive, inflation is between 3-10% a year. It is harmful to the economy because it heats-up economic growth too fast. People start to buy more than they need to avoid tomorrow's much higher prices. This increased buying drives demand even further so that suppliers can't keep up. More important, neither can wages. As a result, common goods and services are priced out of the reach of most people.

Galloping Inflation

When inflation rises to 10% or more, it wreaks absolute havoc on the economy. Money loses value so fast that business and employee income can't keep up with costs and prices. Foreign investors avoid the country, depriving it of needed capital. The economy becomes unstable, and government leaders lose credibility. Galloping inflation must be prevented at all costs.

Hyperinflation

Hyperinflation is when prices skyrocket more than 50% a month. It is very rare. In fact, most examples of hyperinflation occur when governments print money to pay for wars. Examples of hyperinflation include Germany in the 1920s, Zimbabwe in the 2000s, and Venezuela in the 2010s.² The last time America experienced hyperinflation was during its civil war.

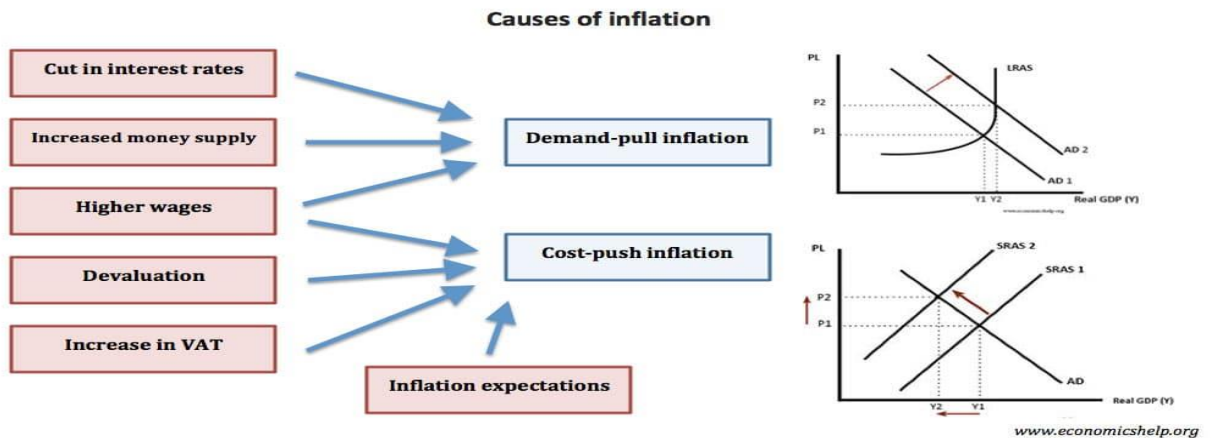
Stagflation

Stagflation is when economic growth is stagnant, but there still is price inflation.⁴ This combination seems contradictory, if not impossible. Why would prices go up when there isn't enough demand to stoke economic growth?

It happened in the 1970s when the United States abandoned the gold standard. Once the dollar's value was no longer tied to gold, it plummeted. At the same time, the price of gold skyrocketed.

Stagflation didn't end until Federal Reserve Chairman Paul Volcker raised the fed funds rate to the double-digits. He kept it there long enough to dispel expectations of further inflation. Because it was such an unusual situation, stagflation probably won't happen again.

CAUSES OF INFLATION



Summary of Main causes of inflation

1. Demand-pull inflation – aggregate demand growing faster than aggregate supply (growth too rapid)
2. Cost-push inflation – For example, higher oil prices feeding through into higher costs.
3. Devaluation – increasing cost of imported goods, and also the boost to domestic demand.
4. Rising wages – higher wages increase firms costs and increase consumers' disposable income to spend more.
5. Expectations of inflation – causes workers to demand wage increases and firms to push up prices.

INFLATIONARY GAP

Otherwise known as an expansionary gap, an inflationary gap is the gap between an economy's full-employment real GDP and its real GDP. In other words, the inflationary gap refers to the difference (that is, the gap) between the actual gross domestic product (GDP) and the GDP that would exist if the economy were at full employment (this is also known as the "potential GDP").

In the case of an inflationary gap, the real GDP is higher than the potential GDP. (This is in contrast to a deflationary gap, when the real GDP is lower than the potential GDP.) The real GDP is greater than the potential GDP due to the fact that, when the real GDP increases, the general price level also increases in the long run.

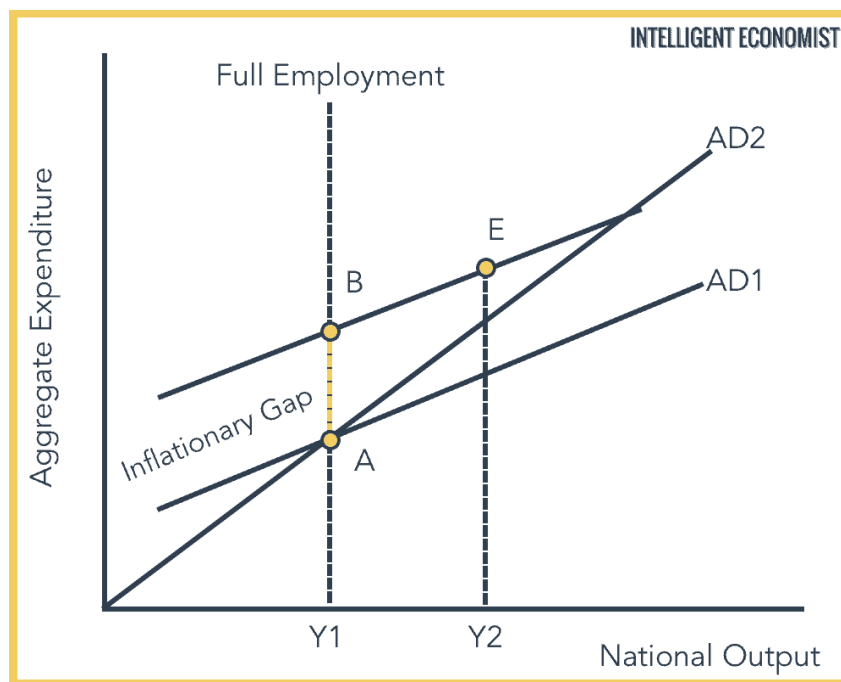
First established by influential economist John Maynard Keynes, the macroeconomic concept of the inflationary gap is applied in order to assess and quantify the pressure of inflation. During the course of the business cycle, it arises when the economy is in the process of expanding. Specifically, they appear when the output of an economy that could potentially be created at full employment (that is, the full-employment real GDP) is less than the equilibrium level of that economy.

In practice, an inflationary gap happens when demand for goods and services is greater than production as a result of situations like high employment, high government expenditure, and high levels of trade activity. Then, the real GDP ends up higher than the potential GDP—there is an inflationary gap. It's called an inflationary gap because the higher real GDP leads to higher levels of consumption throughout the economy, increasing prices over time.

To describe this process more specifically: consumers experience higher levels of demand for goods and services because there are more funds available throughout the economy. Meanwhile, supply has not caught up with this higher demand, as production levels do not usually increase as quickly as consumer demand does. As a result, prices increase in order to return the market to equilibrium.

Inflationary Gap Graph

The graph below is a visual representation of an inflationary gap. In this image, the vertical axis shows aggregate expenditure, while the horizontal axis shows national income or aggregate output.



Furthermore, in the above graph, Y_1 is the national income level at full employment. $C + I + G + X - M$ is equal to the aggregate demand curve marked AD. This crosses the 45 degree line at point A, which means that an equilibrium income is at Y_1 .

The price will not rise, because aggregate demand and supply are equal. And then if the AD1 curve moves up to AD2, the equilibrium output does not increase—output can't increase past the full employment level.

To put it another way, full employment means output is unable to go up to Y_2 . So when we're at the level of Y_1 full employment output, the inflationary gap is AB (as marked in the diagram). The distance, vertically, from the aggregate demand and the 45 degree line—at the full employment level of national income—is the inflationary gap.

EFFECTS OF INFLATION

1. Erodes Purchasing Power

This first effect of inflation is really just a different way of stating what it is. Inflation is a decrease in the purchasing power of currency due to a rise in prices across the economy. Within living memory, the average price of a cup of coffee was a dime. Today the price is closer to two dollars.

Such a price change could conceivably have resulted from a surge in the popularity of coffee, or price pooling by a cartel of coffee producers, or years of devastating drought/flooding/conflict in a key coffee-growing region. In those scenarios, the price of coffee products would rise, but the rest of the economy would carry on largely unaffected. That example would not qualify as inflation since only the most caffeine-addled consumers would experience significant depreciation in their overall purchasing power.

2. Encourages Spending, Investing

A predictable response to declining purchasing power is to buy now, rather than later. Cash will only lose value, so it is better to get your shopping out of the way and stock up on things that probably won't lose value.

For consumers, that means filling up gas tanks, stuffing the freezer, buying shoes in the next size up for the kids, and so on. For businesses, it means making capital investments that, under different circumstances, might be put off until later. Many investors buy gold and other precious metals when inflation takes hold, but these assets' volatility can cancel out the benefits of their insulation from price rises, especially in the short term.

3. Causes More Inflation

Unfortunately, the urge to spend and invest in the face of inflation tends to boost inflation in turn, creating a potentially catastrophic feedback loop. As people and businesses spend more quickly in an effort to reduce the time they hold their depreciating currency, the economy finds itself awash in cash no one particularly wants. In other words, the supply of money outstrips the demand, and the price of money—the purchasing power of currency—falls at an ever-faster rate.

When things get really bad, a sensible tendency to keep business and household supplies stocked rather than sitting on cash devolves into hoarding, leading to empty grocery store shelves. People become desperate to offload currency so that every payday turns into a frenzy of spending on just about anything so long as it's not ever-more-worthless money.

4. Raises the Cost of Borrowing

As these examples of hyperinflation show, states have a powerful incentive to keep price rises in check. For the past century in the U.S., the approach has been to manage inflation using monetary policy. To do so, the Federal Reserve (the U.S. central

bank) relies on the relationship between inflation and interest rates. If interest rates are low, companies and individuals can borrow cheaply to start a business, earn a degree, hire new workers, or buy a shiny new boat. In other words, low rates encourage spending and investing, which generally stoke inflation in turn.

5. Lowers the Cost of Borrowing

When there is no central bank, or when central bankers are beholden to elected politicians, inflation will generally lower borrowing costs.

Say you borrow \$1,000 at a 5% annual rate of interest. If inflation is 10%, the real value of your debt is decreasing faster than the combined interest and principle you're paying off. When levels of household debt are high, politicians find it electorally profitable to print money, stoking inflation and whisking away voters' obligations. If the government itself is heavily indebted, politicians have an even more obvious incentive to print money and use it to pay down debt. If inflation is the result, so be it (once again, Weimar Germany is the most infamous example of this phenomenon).

6. Reduces Unemployment

There is some evidence that inflation can push down unemployment. Wages tend to be sticky, meaning that they change slowly in response to economic shifts. John Maynard Keynes theorized that the Great Depression resulted in part from wages' downward stickiness. Unemployment surged because workers resisted pay cuts and were fired instead (the ultimate pay cut).

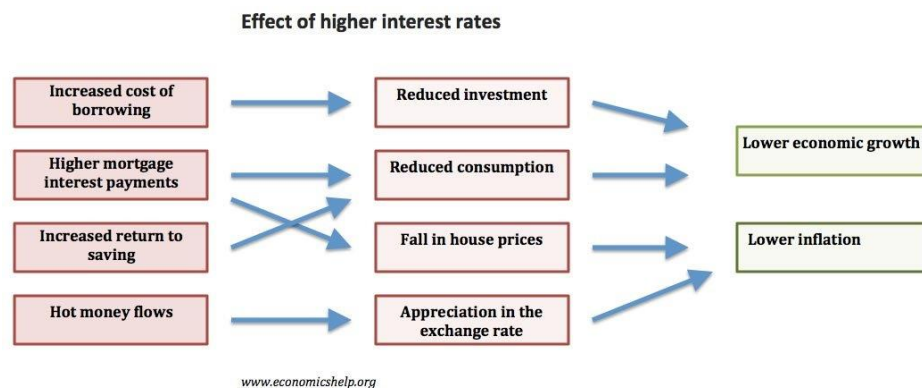
The same phenomenon may also work in reverse: wages' upward stickiness means that once inflation hits a certain rate, employers' real payroll costs fall, and they're able to hire more workers.

CONTROL OF INFLATION

1. **Monetary policy** – Higher interest rates reduce demand in the economy, leading to lower economic growth and lower inflation.
2. **Control of money supply** – Monetarists argue there is a close link between the money supply and inflation, therefore controlling money supply can control inflation.
3. **Supply-side policies** – policies to increase the competitiveness and efficiency of the economy, putting downward pressure on long-term costs.
4. **Fiscal policy** – a higher rate of income tax could reduce spending, demand and inflationary pressures.
5. **Wage controls** – trying to control wages could, in theory, help to reduce inflationary pressures. However, apart from the 1970s, it has been rarely used.

In a period of rapid economic growth, demand in the economy could be growing faster than its capacity to meet it. This leads to inflationary pressures as firms respond to shortages by putting up the price. We can term this demand-pull inflation. Therefore, reducing the growth of aggregate demand (AD) should reduce inflationary pressures.

The Central bank could **increase** interest rates. Higher rates make borrowing more expensive and saving more attractive. This should lead to lower growth in consumer spending and investment. See more on higher interest rates



A higher interest rate should also lead to a higher exchange rate, which helps to reduce inflationary pressure by:

- Making imports cheaper. (lower price of imported goods)
- Reducing demand for exports.
- Increasing incentive for exporters to cut costs.

Interest rates were increased in the late 1980s / 1990 to try and control the rise in inflation.

As part of monetary policy, many countries have an inflation target (e.g. UK inflation target of 2%, +/-1). The argument is that if people believe the inflation target is credible, then it will help to lower inflation expectations. If inflation expectations are low, it becomes easier to control inflation.

Countries have also made Central Bank independent in setting monetary policy. The argument is that an independent Central Bank will be free from political pressures to set low-interest rates before an election.

DEFLATION

Deflation is a general decline in prices for goods and services, typically associated with a contraction in the supply of money and credit in the economy. During deflation, the purchasing power of currency rises over time.

Understanding Deflation

Deflation causes the nominal costs of capital, labor, goods, and services to fall, though their relative prices may be unchanged. Deflation has been a popular concern among economists for decades. On its face, deflation benefits consumers because they can purchase more goods and services with the same nominal income over time.

However, not everyone wins from lower prices and economists are often concerned about the consequences of falling prices on various sectors of the economy, especially

in financial matters. In particular, deflation can harm borrowers, who can be bound to pay their debts in money that is worth more than the money they borrowed, as well as any financial market participants who invest or speculate on the prospect of rising prices.

Causes of Deflation

By definition, monetary deflation can only be caused by a decrease in the supply of money or financial instruments redeemable in money. In modern times, the money supply is most influenced by central banks, such as the Federal Reserve. When the supply of money and credit falls, without a corresponding decrease in economic output, then the prices of all goods tend to fall. Periods of deflation most commonly occur after long periods of artificial monetary expansion. The early 1930s was the last time significant deflation was experienced in the United States. The major contributor to this deflationary period was the fall in the money supply following catastrophic bank failures. Other nations, such as Japan in the 1990s, have experienced deflation in modern times.

World-renowned economist Milton Friedman argued that under optimal policy, in which the central bank seeks a rate of deflation equal to the real interest rate on government bonds, the nominal rate should be zero, and the price level should fall steadily at the real rate of interest. His theory birthed the Friedman rule, a monetary policy rule.

EFFECTS OF DEFLATION

Frequently, deflation occurs during recessions. It is considered an adverse economic event and can cause many negative effects on the economy, including:

Increase in unemployment

During deflation, the unemployment rate will rise. Since price levels are decreasing, producers tend to cut their costs by laying off their employees.

Increase in the real value of debt

Deflation is associated with an increase in interest rates, which will cause an increase in the real value of debt. As a result, consumers are likely to defer their spending.

Deflation spiral

This is a situation where decreasing price levels trigger a chain reaction that leads to lower production, lower wages, decreased demand, and even lower price levels.

During a recession, the deflation spiral is a significant economic challenge because it further worsens the economic situation.

REFERENCES:

1. M.C. Vaish, Monetary Theory, Vikas Publishing House, New Delhi, 2014
2. K.P.M .Sundaram, Money, banking and International Trade, Swultan Chand & Co.,
3. G.N. Halm, Monetary Theory, Asia Publish House, 2001.
4. D.M.Mithani, Money, Banking International Trade and Pub;ic Finance, Himalaya Publishing House.
5. M.L.Jhingan, Vrinda Publications (P) LTD, New Delhi.
6. A.W.Stonier and D.C.Hague, A Text book of Economic Theory, 4/e, 1972
7. S.B. Guptha, Monetary Economics, S.Chand Publications.