SUBJECT-Engineering Economics

SEM-3rd

BRANCH-Mechanical,Civil

MODULE-III & IV

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Inflation

Inflation refers to the rise in the prices of most goods and services of daily or common use, such as food, clothing, housing, recreation, transport, consumer staples, etc. Inflation measures the average price change in a basket of commodities and services over time. The opposite and rare fall in the price index of this basket of items is called 'deflation'. Inflation is indicative of the decrease in the purchasing power of a unit of a country's currency. This is measured in percentage.

Types of Inflation

(a)Demand Pull Inflation (b) Cost-Push Inflation (c)Open Inflation (d)Repressed Inflation

(e)Hyper-Inflation (f)Creeping and Moderate Inflation (g)True Inflation (h)Semi-Inflation

Demand Pull Inflation

This is when the aggregate demand in an economy exceeds the aggregate supply. This increase in the aggregate demand might occur due to an increase in the money supply or income or the level of public expenditure.

This concept is associated with full employment when altering the supply is not possible. Take a look at the graph below:

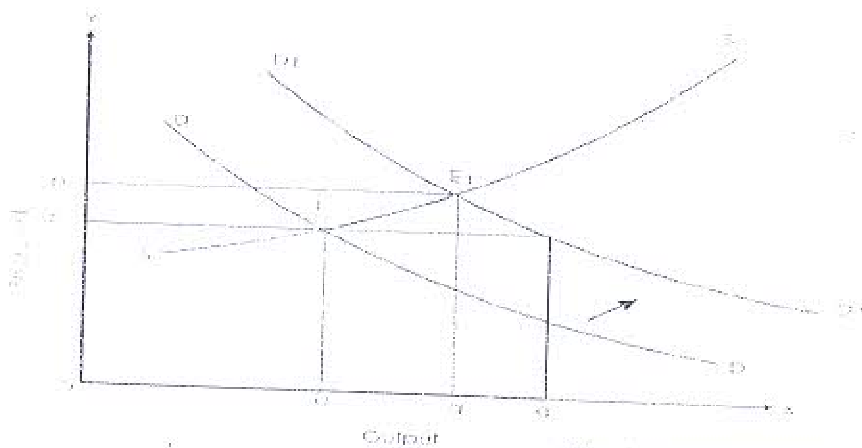

Fig. 1 - Demand Pull Inflation

In the graph above, SS is the aggregate supply curve and DD is the aggregate demand curve. Further,

- Op is the equilibrium price
- Oq is the equilibrium output

Exogenous causes shift the demand curve to the right to D_1D_1. Therefore, at the current price (Op), the demand increases by qq_2. However, the supply is Oq.

Hence, the excess demand for qq_2 puts pressure on the price, increasing it to Op_1. Therefore, there is a new equilibrium at this price, where demand equals supply. As you can see, the excess demand is eliminated as follows:

- The price rises which leads to a fall in demand and a rise in supply.

Favourable Impacts of Inflation

The favourable impacts of inflation are as follows:

(i)Higher Profits

Inflation, usually, benefits the producers of products. They experience better profits since they can sell their products at higher prices.

(ii)Better Investment Returns

During inflation, investors and entrepreneurs receive added incentives for investing in productive activities. Therefore, they receive better returns.

(iii)Increase in Production

Once the producers receive the right investment, they create more goods and services. Hence, inflation leads to an increase in production of products/services.

(iv)More Employment and Better Income

Since production increases, there is an increased demand for the various factors of production, including manpower. Therefore, employment and income increases during inflation.

(v)Shareholders can earn a good income

If a company earns higher profits, which is possible during inflation, it can declare dividends to its shareholders. Thus, the shareholders can experience a rise in their dividend income during inflationary periods.

(vi)Benefits to Borrowers

During inflation, the purchasing power of money decreases. Therefore, if the borrower is paying a rate of interest which is less than the inflation rate, then he gains in the process. This is because the real value of the money that the borrower returns is actually less than that of the money borrowed.

Unfavourable Impacts of Inflation

The unfavourable impacts of inflation are as follows:

(i)Fixed-Income Groups experience a fall in income

The true income of an individual is the purchasing power of his money income

For people belonging to the fixed-income group like salaried individuals, pensioners, etc. this means that they will experience a fall in real income. In other words, their purchasing power will reduce.

(ii)Inequality in Income Distribution Increases

During inflation, businessmen and entrepreneurs experience an increase in profits. On the other hand, people belonging to the fixed-income groups experience a decline in their real income. Hence, the inequality in income distribution becomes acute during this period.

(iii)Upsets the Planning Process

During inflation, the prices of goods, raw materials, and factor services increase. Therefore, the Government has to spend more money to complete any investment project taken up during the planning period.

If the Government fails to raise more financial resources through savings or taxation, then it upsets the entire planning process.

(iv)Speculative Investment Increases

Let's say that the price levels are rising at a very fast rate. People are unsure about how much the prices will rise in the next few weeks or months. In such cases, many people start speculative investments.

For example, they might start purchasing shares, gems, land, etc. just for speculative purposes. This is done with the objective of earning quick profits. Such investments do not help in creating productive capital in the economy.

(v)Harmful Effects on Capital Accumulation

Let's say that rising prices become chronic in an economy. During such periods, people start preferring goods to money since the real value of money will fall in the future. Also, people start preferring immediate consumption to consumption in the future.
Therefore, the general desire to save starts reducing. As the willingness and ability to save reduces, the amount of funds available for further investment reduces too. Therefore, the overall impact on the capital accumulation of the economy is negative since capital accumulation in an economy depends on the growth of investment.

(vi)Lenders face Losses

Under favourable impacts of inflation, we mentioned that borrowers benefit from inflation. Therefore, lenders stand a chance of losing during such periods. This is because they receive an amount having lower purchasing power than the amount loaned.

(vii)Negative Impact on Export Income

Since the prices of raw materials and factors of production increase, the prices of export items also increase during inflation. Hence, their demand in the foreign markets might fall which leads to a fall in the export income of the country.

Cost-Push Inflation

Supply can also cause inflationary pressure. If the aggregate demand remains unchanged but the aggregate supply falls due to exogenous causes, then the price level increases. Take a look at the graph below:

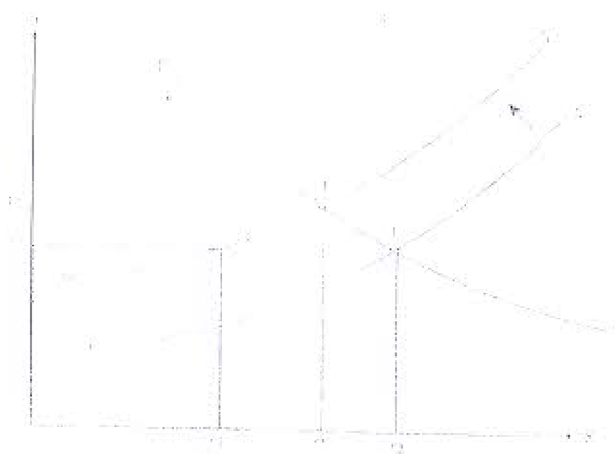

Fig. 2 - Cost-Push Inflation

In the graph above, the equilibrium price is Op and the equilibrium output is Oq. If the aggregate supply falls, ... the supply curve SS shifts left to reach S1S1.

Now, at the price Op, the demand is Oq but the supply is Oq2 which is lesser than Oq. Therefore, the prices are pushed high till a new equilibrium is reached at Op1.

At What are the main causes of Demand-Pull Inflation?

1. **A depreciation of the exchange rate** increases the price of imports and reduces the foreign price of a country's exports. If consumers buy fewer imports, while exports grow, AD in will rise – and there may be a multiplier effect on the level of demand and output
2. **Higher demand from a fiscal stimulus** e.g. lower direct or indirect taxes or higher government spending. If direct taxes are reduced, consumers have more disposable income causing demand to rise. Higher government spending and increased borrowing creates extra demand in the circular flow
3. **Monetary stimulus to the economy:** A fall in interest rates may stimulate too much demand – for example in raising demand for loans or in leading to house price inflation. Monetarist economists believe that inflation is caused by "too much money chasing too few goods" and that governments can lose control of inflation if they allow the financial system to expand the money supply too quickly.
4. **Fast growth in other countries** – providing a boost to UK exports overseas. Export sales provide an extra flow of income and spending into the UK circular flow – so what is happening to the economic cycles of other countries definitely affects the UK

Cost-push inflation

Cost-push inflation occurs when firms respond to **rising costs** by increasing prices in order to **protect their profit margins.**

There are many reasons why costs might rise:

1. **Component costs:** e.g. an increase in the prices of raw materials and other components. This might be because of a rise in commodity prices such as oil, copper and agricultural products used in food processing. A recent example has been a surge in the world price of wheat.
2. **Rising labour costs** - caused by wage increases, which are greater than improvements in productivity. Wage costs often rise when unemployment is low because skilled workers become scarce and this can drive pay levels higher. Wages might increase when people **expect higher inflation** so they ask for more pay in order to protect their real incomes. Trade unions may use their bargaining power to bid for and achieve increasing wages, this could be a cause of cost-push inflation
3. **Expectations of inflation** are important in shaping what actually happens to inflation. When people see prices are rising for everyday items they get concerned about the effects of inflation on their real standard of living. One of the dangers of a pick-up in inflation is what the Bank of England calls "**second-round effects**" i.e. an initial rise in prices triggers a burst of higher pay claims as workers look to protect their way of life. This is also known as a "wage-price effect"

4. Methods of Measuring National Income:

There are four methods of measuring national income. Which method is to be used depends on the availability of data in a country and the purpose in hand.

(1) Product Method:

According to this method, the total value of final goods and services produced in a country during a year is calculated at market prices. To find out the GNP, the data of all productive activities, such as agricultural products, wood received from forests, minerals received from mines, commodities produced by industries, the contributions to production made by transport, communications, insurance companies, lawyers, doctors, teachers, etc. are collected and assessed at market prices. Only the final goods and services are included and the intermediary goods and services are left out.

(2) Income Method:

According to this method, the net income payments received by all citizens of a country in a particular year are added up, i.e., net incomes that accrue to all factors of production by way of net rents, net wages, net interest and net profits are all added together but incomes received in the form of transfer payments are not included in it. The data pertaining to income are obtained from different sources, for instance, from income tax department in respect of high income groups and in case of workers from their wage bills.

(3) Expenditure Method:

According to this method, the total expenditure incurred by the society in a particular year is added together and includes personal consumption expenditure, net domestic investment, government expenditure on goods and services, and net foreign investment. This concept is based on the assumption that national income equals national expenditure.

(4) Value Added Method:

Another method of measuring national income is the value added by industries. The difference between the value of material outputs and inputs at each stage of production is the value added. If all such differences are added up for all industries in the economy, we arrive at the gross domestic product.

Banking

A **bank** is a financial institution that accepts deposits from the public and creates credit.[1] Lending activities can be performed either directly or indirectly through capital markets. Due to their importance in the financial system and influence on national economies, banks are highly regulated in most countries. Most nations have institutionalized a system known as fractional reserve banking under which banks hold liquid assets equal to only a portion of their current liabilities. In addition to other regulations intended to ensure liquidity, banks are generally subject to minimum capital requirements based on an international set of capital standards, known as the Basel Accords.

The word *bank* was borrowed in Middle English from Middle French *banque*, from Old Italian *banca*, meaning "table", from Old High German *banc, bank* "bench, counter". Benches were used as makeshift desks or exchange counters during the Renaissance by Jewish[10] Florentine bankers, who used to make their transactions atop desks covered by green tablecloths.

Types of Banks:

Banks are of various types which are explained as under:

1. Commercial Banks:

Commercial banks are those banks which perform all kinds of banking functions such as accepting deposits, advancing loans, credit creation, and agency functions. They are also called joint stock banks because they are organised in the same manner as joint stock companies.

They usually advance short-term loans to customers. Of late, they have started giving medium term and long-term loans also. In India 20 major commercial banks have been nationalised, whereas in developed countries they are run like joint stock companies in the private sector. Some of the commercial banks in India are Andhra Bank, Canara Bank, Indian Bank, Punjab National Bank, etc.

2. Exchange Banks:

Exchange banks are those banks which deal in foreign exchange and specialise in financing foreign trade. They are also called foreign exchange banks. In India, these exchange banks have their head offices located outside India. The Chartered Bank and the Brindlays Bank have their head officers in England, whereas the American Express Bank, and Citi Bank have their head offices in the USA. These banks also render other services such as collecting and supplying information about the foreign customers, providing remittance facilities etc.

3. Industrial Banks:

Industrial banks are those banks which provide medium term and long-term finance to industries for the purchase of land, machinery etc. They underwrite the debentures and shares of industries and also subscribe to them. In India, there are a number of financial institutions which perform the functions of industrial banks such as Industrial Development Bank of India, Industrial Finance Corporation of India, Industrial Credit and Investment Corporation of India, etc. Each State in India has its own State Financial Corporation. These institutions are also known as Development Banks.

4. Agricultural Banks:
Agricultural banks are those banks which provide credit to farmers for short-term, medium-term and long-term needs. In India, commercial banks, regional rural banks and Agricultural Cooperative Banks provide short-term loans to farmers. Land Development Bank give medium-term and long-term loans to farmers on the mortgage of their land. The National Bank for Agriculture and Rural Development (NABARD) provides refinance facilities to all types of banks which give loans to agriculturists.

5. Cooperative Banks:
Cooperative banks are those financial institutions which are organised on the principle of cooperation. They provide short-term and medium-term loans to their members. In rural areas, there are agricultural cooperative banks which accept deposits and give loans to agriculturists, rural artisans, etc.

In urban areas, there are also cooperative banks which perform the functions of ordinary commercial banks but give loans to their members only. There is a State Cooperative Bank in every state of India with its branches at the district level known as the Central Cooperative Bank. The Central Cooperative Bank, in turn, has is branches both in urban and rural areas.

Every State Cooperative bank is an apex bank which provides credit facilities to the Central Cooperative Banks. It mobilises financial resources from the richer sections of the urban population by accepting deposits and creating credit like commercial banks and borrowing from the money market. It also gets funds from the Reserve Bank of India.

6. Savings Banks:
Savings banks help promote small savings, and mobilise them. They have been very successful in Japan and Germany. In India, post offices act as savings bank.

7. Central Bank:
The central bank is the apex bank in a country which controls its monetary and banking structure. It is owned by the government of the country and operates in national interest. It regulates and issues currency, performs banking and agency services for the state, keeps cash reserves of commercial banks, keeps and manages international currency, acts as the lender of the last resort, acts as a clearing house, and controls of credit. The Reserve Bank of India is the Central bank in India.

Meaning of Commercial Banks:
A commercial bank is a financial institution which performs the functions of accepting deposits from the general public and giving loans for investment with the aim of earning profit.

(A) Primary Functions:
1. It accepts deposits:
A commercial bank accepts deposits in the form of current, savings and fixed deposits. It collects the surplus balances of the Individuals, firms and finances the temporary needs of commercial transactions. The first task is, therefore, the collection of the savings of the public. The bank does this by accepting deposits from its customers. Deposits are the lifeline of banks.

Deposits are of three types as under:
(i) Current account deposits:
Such deposits are payable on demand and are, therefore, called demand deposits. These can be withdrawn by the depositors any number of times depending upon the balance in the account. The bank does not pay any Interest on these deposits but provides cheque facilities. These accounts are generally maintained by businessmen and Industrialists who receive and make business payments of large amounts through cheques.

(ii) Fixed deposits (Time deposits):
Fixed deposits have a fixed period of maturity and are referred to as time deposits. These are deposits for a fixed term, i.e., period of time ranging from a few days to a few years. These are neither payable on demand nor they enjoy cheque facilities.

They can be withdrawn only after the maturity of the specified fixed period. They carry higher rate of interest. They are not treated as a part of money supply Recurring deposit in which a regular deposit of an agreed sum is made is also a variant of fixed deposits.

(ii) Savings account deposits:

These are deposits whose main objective is to save. Savings account is most suitable for individual households. They comb. the features of both current account and fixed deposits. They are payable on demand and also withdraw able by cheque. But bank gives this facility with some restrictions, e.g., a bank may allow four or five cheques in a month. Interest paid on savings account deposits in lesser than that of fixed deposit.

2. It gives loans and advances:

The second major function of a commercial bank is to give loans and advances particularly to businessmen and entrepreneurs and thereby earn interest. This is, in fact, the main source of income of the bank. A bank keeps a certain portion of the deposits with itself as reserve and gives (lends) the balance to the borrowers as loans and advances in the form of cash credit, demand loans, short-run loans, overdraft as explained under.

(i) Cash Credit:

An eligible borrower is first sanctioned a credit limit and within that limit he is allowed to withdraw a certain amount on a given security. The withdrawing power depends upon the borrower's current assets, the stock statement of which is submitted by him to the bank as the basis of security. Interest is charged by the bank on the drawn or utilised portion of credit (loan).

(ii) Demand Loans:

A loan which can be recalled on demand is called demand loan. There is no stated maturity. The entire loan amount is paid in lump sum by crediting it to the loan account of the borrower. Those like security brokers whose credit needs fluctuate generally, take such loans on personal security and financial assets.

(iii) Short-term Loans:

Short-term loans are given against some security as personal loans to finance working capital or as priority sector adv...
The entire amount is repaid either in one instalment or in a number of instalments over the period of loan.

Investment:

Commercial banks invest their surplus fund in 3 types of securities:

(i) Government securities, (ii) Other approved securities and (iii) Other securities. Banks earn interest on these securities.

(B) Secondary Functions:

Apart from the above-mentioned two primary (major) functions, commercial banks perform the following secondary functions also.

3. Discounting bills of exchange or bundles:

A bill of exchange represents a promise to pay a fixed amount of money at a specific point of time in future. It can also be encashed earlier through discounting process of a commercial bank. Alternatively, a bill of exchange is a document acknowledging an amount of money owed in consideration of goods received. It is a paper asset signed by the debtor and the creditor for a fixed amount payable on a fixed date. It works like this.

Suppose, A buys goods from B, he may not pay B immediately but instead give B a bill of exchange stating the amount of money owed and the time when A will settle the debt. Suppose, B wants the money immediately, he will present the bill of exchange (Hundi) to the bank for discounting. The bank will deduct the commission and pay to B the present value of the bill. When the bill matures after specified period, the bank will get payment from A.

4. Overdraft facility:

An overdraft is an advance given by allowing a customer keeping current account to overdraw his current account up to an agreed limit. It is a facility to a depositor for overdrawing the amount than the balance amount in his account.

In other words, depositors of current account make arrangement with the banks that in case a cheque has been drawn by them which are not covered by the deposit, then the bank should grant overdraft and honour the cheque. The security for overdraft is generally financial assets like shares, debentures, life insurance policies of the account holder, etc.

5. Agency functions of the bank:

The bank acts as an agent of its customers and gets commission for performing agency functions as under:

(i) Transfer of funds:

It provides facility for cheap and easy remittance of funds from place-to-place through demand drafts, mail transfers, telegraphic transfers, etc.

(ii) Collection of funds:

It collects funds through cheques, bills, bundles and demand drafts on behalf of its customers.