

APPOLO STUDY CENTRE

Test - 4

UNIT - VI INDIAN ECONOMY

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SYLLABUS PORTION	SCHOOL BOOK PORTION
Sources of Revenue - Reserve Bank of India - Fiscal Policy and Monetary Policy - Finance Commission - Resource Sharing between Union and State Governments - goods and Services Tax.	12 th STD
	Unit 5 - Monetary Economics அலகு 5 - பணவியல் பொருளியல்
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12th Economics
CHAPTER 5
Monetary Economics

Inflation is taxation without legislation.

-Milton Friedman

Introduction

Monetary Economics is a branch of economics that provides a framework for analyzing money and its functions as a medium of exchange, store of value and unit of account. It examines the effects of monetary systems including regulation of money and associated financial institutions.

Money

Meaning

Money is anything that is generally accepted as payment for goods and services and repayment of debts and that serves as a medium of exchange. A medium of exchange is anything that is widely accepted as a means of payments. In recent years, the importance of credit has increased in all the countries of the world. Credit instruments are used on an extensive scale. The use of cheques, bills of exchange, etc. has gone up. It should however, be remembered that money is the basis of credit.

Definitions

Many economists developed definition for money. Among these, definitions of Walker and Crowther are given below:

“ Money is, what money does”

- Walker.

“Money can be anything that is generally acceptable as a means of exchange and at the same time acts as a measure and a store of value”.

-Crowther

The history of Barter system starts way back in 6000 BC

- Barter system was introduced by Mesopotamia tribes.
- Phoenicians adopted bartering of goods with various other cities across oceans.
- Babylonian's also developed an improved barter system, where goods were exchanged for goods.

Evolution of Money

Barter System

The introduction of money as a medium of exchange was one of the greatest inventions of mankind. Before money was invented, exchange took place by Barter, that is, commodities and services were directly exchanged for other commodities and services. Under the barter system, buyers and sellers of commodities had to face a number of difficulties. Surplus goods were exchanged for money which in turn was exchanged for other needed goods. Goods like furs, skins, salt, rice, wheat, utensils, weapons, etc. were commonly used as money. Such exchange of goods for goods was known as "Barter Exchange" or "Barter System".

Metallic Standard

After the barter system and commodity money system, modern money systems evolved. Among these, metallic standard is the premier one. Under metallic standard, some kind of metal either gold or silver is used to determine the standard value of the money and currency. Standard coins made out of the metal are the principal coins used under the metallic standard. These standard coins are full bodied or full weighted legal tender. Their face value is equal to their intrinsic metal value.

Gold Standard

Gold Standard is a system in which the value of the monetary unit or the standard currency is directly linked with gold. The monetary unit is defined in terms of a certain weight of gold. The purchasing power of a unit of money is maintained equal to the value of a fixed weight of gold.

Silver Standard

The silver standard is a monetary system in which the standard economic unit of account is a fixed weight of silver. The silver standard is a monetary arrangement in which a country's Government allows conversion of its currency into fixed amount of silver.

Paper Currency Standard

The paper currency standard refers to the monetary system in which the paper currency notes issued by the Treasury or the Central Bank or both circulate as unlimited legal tender. Paper currency is not convertible into any metal. Its value is determined independent of the value of gold or any other commodity. The paper standard is also known as managed currency standard. The quantity of money in circulation is controlled by the monetary authority to maintain price stability.

Plastic Money

The latest type of money is plastic money. Plastic money is one of the most evolved forms of financial products. Plastic money is an alternative to the cash or the standard "money". Plastic money is a term that is used predominantly in reference to the hard plastic cards used every day in place of actual bank notes. Plastic money can come in many different forms such as Cash cards, Credit cards, Debit cards, Pre-paid Cash cards, Store cards, Forex cards and Smart cards. They aim at removing the need for carrying cash to make transactions.

Crypto Currency

A digital currency in which encryption techniques are used to regulate the generation of units of currency and verify the transfer of funds, operating independently of a Central Bank.

Decentralised crypto currencies such as Bitcoin now provide an outlet for Personal Wealth that is beyond restriction and confiscation.

Functions of Money

The main functions of money can be classified into four categories:

1.Primary Functions:

i) Money as a medium of exchange:

This is considered as the basic function of money. Money has the quality of general acceptability, and all exchanges take place in terms of money. On account of the use of money, the transaction has now come to be divided into two parts. First, money is obtained through sale of goods or services. This is known as sale. Later, money is obtained to buy goods and services. This is known as purchase. Thus, in the modern exchange system money acts as the intermediary in sales and purchases.

ii) Money as a measure of value:

The second important function of money is that it measures the value of goods and services. In other words, the prices of all goods and services are expressed in terms of money. Money is thus looked upon as a collective measure of value. Since all the values are expressed in terms of money, it is easier to determine the rate of exchange between various types of goods in the community.

2.Secondary Functions

i) Money as a Store of value: Savings done in terms of commodities were not permanent. But, with the invention of money, this difficulty has now disappeared and savings are now done in terms of money. Money also serves as an excellent store of wealth, as it can be easily converted into other marketable assets, such as, land, machinery, plant etc.

ii) Money as a Standard of Deferred Payments: Borrowing and lending were difficult problems under the barter system. In the absence of money, the only in terms of goods and services. But the modern money-economy has greatly facilitated the borrowing and lending processes. In other words, money now acts as the standard of deferred payments.

iii) Money as a Means of Transferring Purchasing Power: The field of exchange also went on extending with growing economic development. The

exchange of goods is now extended to distant lands. It is therefore, felt necessary to transfer purchasing power from one place to another.

3. Contingent Functions

i) Basis of the Credit System: Money is the basis of the Credit System. Business transactions are either in cash or on credit. For example, a depositor can make use of cheques only when there are sufficient funds in his account. The commercial banks create credit on the basis of adequate cash reserves. But, money is at the back of all credit.

ii) Money facilitates distribution of National Income: The task of distribution of national income was exceedingly complex under the barter system. But the invention of money has now facilitated the distribution of income as rent, wage, interest and profit.

iii) Money helps to Equalize Marginal Utilities and Marginal Productivities: Consumer can obtain maximum utility only if he incurs expenditure on various commodities in such a manner as to equalize marginal utilities accruing from them. Now in equalizing these marginal utilities, money plays an important role, because the prices of all commodities are expressed in money. Money also helps to equalize marginal productivities of various factors of production.

iv) Money Increases Productivity of Capital: Money is the most liquid form of capital. In other words, capital in the form of money can be put to any use. It is on account of this liquidity of money that capital can be transferred from the less productive to the more productive uses.

4. Other Functions

i) Money helps to maintain Repayment Capacity: Money possesses the quality of general acceptability. To maintain its repayment capacity, every firm has to keep assets in the form of liquid cash. The firm ensures its repayment capacity with money. Likewise, banks, insurance companies and even governments have to keep some liquid money (i.e., cash) to maintain their repayment capacity.

ii) **Money represents Generalized Purchasing Power:** Purchasing power kept in terms of money can be put to any use. It is not necessary that money should be used only for the purpose for which it has been served.

iii) **Money gives liquidity to Capital:** Money is the most liquid form of capital. It can be put to any use.

Supply of Money

Money supply means the total amount of money in an economy. It refers to the amount of money which is in circulation in an economy at any given time. Money supply plays a crucial role in the determination of price level and interest rates. Money supply viewed at a given point of time is a stock and over a period of time it is a flow.

Meaning of Money Supply

In India, currency notes are issued by the Reserve Bank of India (RBI) and coins are issued by the Ministry of Finance, Government of India (GOI). Besides these, the balance is savings, or current account deposits, held by the public in commercial banks is also considered money. The currency notes are also called fiat money and legal tenders.

Money supply is a stock variable. RBI publishes information for four alternative measures of Money supply, namely M_1, M_2, M_3 and M_4 .

M_1 = Currency, coins and demand deposits

M_2 = M_1 + Savings deposits with post office savings banks

M_3 = M_2 + Time deposits of all commercial and cooperative banks

M_4 = M_3 + Total deposits with Post offices.

M_1 and M_2 are known as narrow money

M_3 and M_4 are known as broad money

The gradations are in decreasing order of liquidity.

Currency Symbol

The new symbol designed by D.Udaya Kumar, a post graduate of IIT Bombay was finally selected by the Union cabinet on 15th July, 2010. The new symbol, is an amalgamation of Devanagari 'Ra' and the Roman 'R' without the stem. The symbol of India rupee came into use on 15th July, 2010. After America, Britain, Japan, Europe Union. India is the 5th country to accept a unique

currency symbol.

Determinants of Money Supply

1. Currency Deposit Ratio (CDR); It is the ratio of money held by the public in currency to that they hold in bank deposits.
2. Reserve deposit Ratio (RDR); Reserve Money consists of two things (a) vault
3. cash in banks and (b) deposits of commercial banks with RBI.
4. Cash Reserve Ratio (CRR); It is the fraction of the deposits the banks must keep with RBI.
5. Statutory Liquidity Ratio (SLR); It is the fraction of the total demand and time.
6. Deposits of the commercial banks in the form of specified liquid assets.

Quantity Theories of Money

Quantity theories of money explain the relationship between quantity of money and value of money. Here, we are given two approaches of Quantity Theory of Money, viz. Fisher's Transaction Approach and Cambridge Cash Balance Approach.

(a) Fisher's Quantity Theory of Money:

The quantity theory of money is a very old theory. It was first propounded in 1588 by an Italian economist, Davanzatti. But, the credit for popularizing this theory in recent years rightly belongs to the well-known American economist, Irving Fisher who published his book, 'The Purchasing Power of Money' in 1911. He gave it a quantitative form in terms of his famous "Equation of Exchange".

The general form of equation given by Fisher is

$$MV = PT$$

Where M = Money Supply/quantity of Money

V = Velocity of Money

P = Price level

T = Volume of Transaction.

Fisher points out that in a country during any given period of time, the total quantity of money (MV) will be equal to the total value of all goods and services bought and sold (PT).

$$MV = PT$$

Supply of Money = Demand for Money

This equation is referred to as “Cash Transaction Equation”.

It is expressed as $P = MV / T$ which implies that the quantity of money determines the price level and the price level in its turn varies directly with the quantity of money, provided ‘V’ and ‘T’ remain constant.

The above equation considers only currency money. But, in a modern economy, bank’s demand deposits or credit money and its velocity play a vital part in business. Therefore, Fisher extended his original equation of exchange to include bank deposits M_1 and its velocity V_1 . The revised equation was:

$PT = MV + M_1V_1$ $P = MV + M_1 V_1 / T$

From the revised equation, it is evident, that the price level is determined by

- (a) the quantity of money in circulation ‘M’
- (b) the velocity of circulation of money ‘V’
- (c) the volume of bank credit money M_1
- (d) the velocity of circulation of credit money V_1 and the volume of trade (T)

Diagrammatic Illustration

Figure (A) shows the effect of changes in the quantity of money on the price level. When the quantity of money is OM, the price level is OP. When the quantity of money is doubled to OM_2 , the price level is also doubled to OP_2 . Further, when the quantity of money is increased four-fold to OM_4 , the price level also increases by four times to OP_4 . This relationship is expressed by the curve $OP = f(M)$ from the origin at 450.

Figure (B), shows the inverse relation between the quantity of money and the value of money, where the value of money is taken on the vertical axis. When the quantity of money is OM , the value of money is OI / P . But with the doubling of the quantity of money to OM_2 , the value of money becomes one-half of what it was before, (OI / P_2) . But, with the quantity of money increasing by four-fold to OM_4 , the value of money is reduced by OI / P_4 . This inverse relationship between the quantity of money and the value of money is shown by downward sloping curve $IO / P = f(M)$.

b) Cambridge Approach (Cash Balances Approach)

i) Marshall's Equation

The Marshall equation is expressed as:

$$M = KPY$$

Where

M is the quantity of money

Y is the aggregate real income of the community

P is Purchasing Power of money

K represents the fraction of the real income which the public desires to hold in the form of money.

Thus, the price level $P = M/KY$ or the value of money (The reciprocal of price level) is $1/P = KY/M$

The value of money in terms of this equation can be found out by dividing the total quantity of goods which the public desires to hold out of the total income by the total supply of money.

According to Marshall's equation, the value of money is influenced not only by changes in M , but also by changes in K

ii) Keynes' Equation

Keynes equation is expressed as:

$$n = pk \text{ (or) } p = n / k$$

Where

n is the total supply of money

p is the general price level of consumption goods

k is the total quantity of consumption units the people decide to keep in the form of cash,

Keynes indicates that K is a real balance, because it is measured in terms of consumer goods.

According to Keynes, peoples' desire to hold money is unaltered by monetary authority. So, price level and value of money can be stabilized through regulating quantity of money (n) by the monetary authority.

Later, Keynes extended his equation in the following form:

$$n = p (k + rk') \text{ or } p = n / (k + rk')$$

Where,

n = total money supply

p = price level of consumer goods

k = peoples' desire to hold money in hand (in terms of consumer goods) in the total income of them

r = cash reserve ratio

k' = community's total money deposit in banks, in terms of consumers goods.

In this extended equation also, Keynes assumes that, k , k' and r are constant. In this situation, price level (P) is changed directly and proportionately changing in money volume (n).

Inflation

Both inflation and deflations are evils of economy. So, understanding of these is essential.

Meaning of Inflation

Inflation is a consistent and appreciable rise in the general price level. In other words, inflation is the rate at which the general level of prices for goods and services is rising and consequently the purchasing power of currency is falling.

Definition

“ Too much of Money chasing too few goods”

- Coulbourn

“A state of abnormal decrease in the quantity of purchasing power”

Gregorye

Types of Inflation

On the basis of speed

(i) Creeping inflation (ii) Walking inflation (iii) Running inflation and (iv) Galloping inflation or Hyper inflation.

The four types of inflation are indicated in Figure-5.2.

- i. **Creeping Inflation:** Creeping inflation is slow-moving and very mild. The rise in prices will not be perceptible but spread over a long period. This type of inflation is in no way dangerous to the economy. This is also known as mild inflation or moderate inflation.
- ii. **Walking Inflation:** When prices rise moderately and the annual inflation rate is a single digit (3% - 9%), it is called walking or trolling inflation.
- iii. **Running Inflation:** When prices rise rapidly like the running of a horse at a rate of speed of 10% - 20% per annum, it is called running inflation.
- iv. **Galloping inflation:** Galloping inflation or hyper inflation points out to unmanageably high inflation rates that run into two or three digits. By high inflation the percentage of the same is almost 20% to 100% from an overall perspective.

The first hyper inflation of the 21st century Zimbabwe's annual inflation rate surged to an unprecedented 3714 percent at the end of April 2007.

Demand-Pull Vs Cost-Push inflation

- i. **Demand-Pull Inflation:** Demand and supply play a crucial role in deciding the inflation levels in the society at all points of time. For

instance, if the demand is high for a product and supply is low, the price of the products increases.

- ii. **Cost-Push Inflation:** When the cost of raw materials and other inputs rises inflation results. Increase in wages paid to labour also leads to inflation.

Wage-Price Spiral

Wage-price spiral is used to explain the cause and effect relationship between rising wages and rising prices or inflation.

Other types of inflation (on the basis of inducement)

- i. **Currency inflation:** The excess supply of money in circulation causes rise in price level.
- ii. **Credit inflation:** When banks are liberal in lending credit, the money supply increases and thereby rising prices.
- iii. **Deficit induced inflation:** The deficit budget is generally financed through printing of currency by the Central Bank. As a result, prices rise.
- iv. **Profit induced inflation:** When the firms aim at higher profit, they fix the price with higher margin. So prices go up.
- v. **Scarcity induced inflation:** Scarcity of goods happens either due to fall in production (eg. farm goods) or due to hoarding and black marketing. This also pushes up the price. (This has happened in Venezuela in the year 2018)
- vi. **Tax induced inflation:** Increase in indirect taxes like excise duty, custom duty and sales tax may lead to rise in price (eg. petrol and diesel). This is also called taxflation.

Causes of Inflation

The main causes of inflation in India are as follows:

- i. **Increase in Money Supply:** Inflation is caused by an increase in the supply of money which leads to increase in aggregate demand. The higher

the growth rate of the nominal money supply, the higher is the rate of inflation.

- ii. **Increase in Disposable Income:** When the disposable income of the people increases, it raises their demand for goods and services. Disposable income may increase with the rise in national income or reduction in taxes or reduction in the saving of the people.
- iii. **Increase in Public Expenditure:** Government activities have been expanding due to developmental activities and social welfare programmes. This is also a cause for price rise.
- iv. **Increase in Consumer Spending:** The demand for goods and services increases when they are given credit to buy goods on hire-purchase and installment basis.
- v. **Cheap Money Policy:** Cheap money policy or the policy of credit expansion also leads to increase in the money supply which raises the demand for goods and services in the economy.
- vi. **Deficit Financing:** In order to meet its mounting expenses, the government resorts to deficit financing by borrowing from the public and even by printing more notes. This raises aggregate demand in relation to aggregate supply, thereby leading to inflationary rise in prices.
- vii. **Black Assests, Activities and Money:** The existence of black money and black assests due to corruption, tax evasion etc., increase the aggregate demand. People spend such money, lavishly. Black marketing and hoarding reduces the supply of goods. These trends tend to raise the price level further.
- viii. **Repayment of Public Debt:** Whenever the government repays its past internal debt to the public, it leads to increase in the money supply with the public. This tends to raise the aggregate demand for goods and services.
- ix. **Increase in Exports:** When exports are encouraged, domestic supply of goods decline. So prices rise.

Effects of Inflation

The effects of inflation can be classified into two heads:

- (1) Effects on Production and
- (2) Effects on Distribution.

1. Effects on Production:

When the inflation is very moderate, it acts as an incentive to traders and producers. This is particularly prior to full employment when resources are not fully utilized. The profit due to rising prices encourages and induces business class to increase their investments in production, leading to generation of employment and income.

- i. However, hyper-inflation results in a serious depreciation of the value of money and it discourages savings on the part of the public.
- ii. When the value of money undergoes considerable depreciation, this may even drain out the foreign capital already invested in the country.
- iii. With reduced capital accumulation, the investment will suffer a serious set-back which may have an adverse effect on the volume of production in the country. This may discourage entrepreneurs and business men from taking business risk.
- iv. Inflation also leads to hoarding of essential goods both by the traders as well as the consumers and thus leading to still higher inflation rate.
- v. Inflation encourages investment in speculative activities rather than productive purposes.

2. Effects on Distribution

- i. **Debtors and Creditors:** During inflation, debtors are the gainers while the creditors are losers. The reason is that the debtors had borrowed when the purchasing power of money was high and now repay the loans when the purchasing power of money is low due to rising prices.
- ii. **Fixed-income Groups:** The fixed income groups are the worst hit during inflation because their incomes being fixed do not bear any relationship

with the rising cost of living. Examples are wage, salary, pension, interest, rent etc.

- iii. **Entrepreneurs:** Inflation is the boon to the entrepreneurs whether they are manufacturers, traders, merchants or businessmen, because it serves as a tonic for business enterprise. They experience windfall gains as the prices of their inventories (stocks) suddenly go up.
- iv. **Investors:** The investors, who generally invest in fixed interest yielding bonds and securities have much to lose during inflation. On the contrary those who invest in shares stand to gain by rich dividends and appreciation in value of shares.

Measures to Control Inflation

Keynes and Milton Friedman together suggested three measures to prevent and control of inflation.

1. Monetary measures,
 2. Fiscal measures (J.M. Keynes) and
 3. Other measures.
1. **Monetary Measures:** These measures are adopted by the Central Bank of the country. They are (i) Increase in Bankrate (ii) Sale of Government Securities in the Open Market (iii) Higher Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR) (iv) Consumer Credit Control and (v) Higher margin requirements (vi) Higher Repo Rate and Reverse Repo Rate.
 2. **Fiscal Measures:** Fiscal policy is now recognized as an important instrument to tackle an inflationary situation. The major anti-inflationary fiscal measures are the following: Reduction of Government Expenditure, Public Borrowing and Enhancing taxation.
 3. **Other Measures:** These measures can be divided broadly into short-term and long-term measures.
 - i. Short-term measures can be in regard to public distribution of scarce essential commodities through fair price shops (Rationing). In India

whenever shortage of basic goods has been felt, the government has resorted to import so that inflation may not get triggered.

- ii. Long-term measures will require accelerating economic growth especially of the wage goods which have a direct bearing on the general price and the cost of living. Some restrictions on present consumption may help in improving saving and investment which may be necessary for accelerating the rate of economic growth in the long run.

Meaning of Deflation, Disinflation and Stagflation

Deflation: The essential feature of deflation is falling prices, reduced money supply and unemployment. Though falling prices are desirable at the time of inflation, such a fall should not lead to the fall in the level of production and employment. But if prices fall from the level of full employment both income and employment will be adversely affected.

Disinflation: Disinflation is the slowing down the rate of inflation by controlling the amount of credit (bank loan, hire purchase) available to consumers without causing more unemployment. Disinflation may be defined as the process of reversing inflation without creating unemployment or reducing output in the economy.

Stagflation: Stagflation is a combination of stagnant economic growth, high unemployment and high inflation.

Trade Cycle

The economic activity in a capitalist economy will have its periodic ups and downs. The study of these ups and downs is called the study of Business cycle or Trade cycle or Industrial Fluctuation.

Meaning of Trade Cycle

A Trade cycle refers to oscillations in aggregate economic activity particularly in employment, output, income, etc. It is due to the inherent contraction and expansion of the elements which energize the economic activities of the nation. The fluctuations are periodical, differing in intensity and changing in its coverage.

Definition

“A trade cycle is composed of periods of good trade characterised by rising prices and low unemployment percentages altering with periods of bad trade characterised by falling prices and high unemployment percentages”.

- J.M. Keynes

Phases of Trade Cycle

The four different phases of trade cycle is referred to as (i) Boom (ii) Recession (iii) Depression and (iv) Recovery. These are illustrated in the Figure.

Phases of Trade Cycle

- i. **Boom or Prosperity Phase:** The full employment and the movement of the economy beyond full employment is characterized as boom period. During this period, there is hectic activity in economy. Money wages rise, profits increase and interest rates go up. The demand for bank credit increases and there is all-round optimism.
- ii. **Recession:** The turning point from boom condition is called recession. This happens at higher rate, than what was earlier. Generally, the failure of a company or bank bursts the boom and brings a phase of recession. Investments are drastically reduced, production comes down and income and profits decline. There is panic in the stock market and business activities show signs of dullness. Liquidity preference of the people rises and money market becomes tight.
- iii. **Depression:** During depression the level of economic activity becomes extremely low. Firms incur losses and closure of business becomes a common feature and the ultimate result is unemployment. Interest prices, profits and wages are low. The agricultural class and wage earners would be worst hit. Banking institutions will be reluctant to advance loans to businessmen. Depression is the worst phase of the business cycle. Extreme point of depression is called as “trough”, because it is a deep point in business cycle. Any person fell down in deeps could not come out from that without other’s help. Similarly, an economy fell down in trough could not come out from this without external help. Keynes advocated that

autonomous investment of the government alone can help the economy to come out from the depression.

Recovery: After a period of depression, recovery sets in. This is the turning point from depression to revival towards upswing. It begins with the revival of demand for capital goods. Autonomous investments boost the activity. The demand slowly picks up and in due course the activity is directed towards the upswing with more production, profit, income, wages and employment. Recovery may be initiated by innovation or investment or by government expenditure (autonomous investment).

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CHAPTER -6

Banking

“Commercial Banks are the institutions that make short term loans to business and in the process create Money’.”

- Culbertson

Introduction

Finance is the life blood of all economic activities such as trade, commerce, agriculture and industry. A bank is generally understood as an institution which provides fundamental financial services such as accepting deposits and lending loans. Banking sector acts as the backbone of modern business world. The banking system significantly contributes for the development of any country. Due to the importance in the financial stability of a country, banks are highly regulated in most countries.

Historical Development

The Ricks Banks of Sweden, which had sprung from a private bank established in 1656 is the oldest central bank in the world. It acquired the sole right of note issue in 1897. But the fundamentals of the art of banking have been developed by the Bank of England (1864) as the first bank of issues.

A large number of central banks were established between 1921 and 1954 in compliance with the resolution passed by the International Finance Conference held at Brussels in 1920. The South African Reserve Bank (1921), the Central Bank of China (1928), The Reserve Bank of New Zealand (1934), The Reserve Bank of India (1935), the Central Bank of Ceylon (1950) and the Bank of Israel (1954) were established.

Commercial banks

Commercial bank refers to a bank, or a division of a large bank, which more specifically deals with deposit and loan services provided to corporations or large/ middle-sized business - as opposed to individual members of the public/small business. They do not provide, long-term credit, as liquidity of assets is to be maintained.

Functions of Commercial Banks:

Commercial banks are institutions that conduct business with profit motive by accepting public deposits and lending loans for various investment purposes.

The functions of commercial banks are broadly classified into primary functions and secondary functions, which are shown in the picture

Functions of Commercial Banks

(a) Primary Functions:

1. Accepting Deposits

It implies that commercial banks are mainly dependent on public deposits. There are two types of deposits, which are discussed as follows

i. Demand Deposits

It refers to deposits that can be withdrawn by individuals without any prior notice to the bank. In other words, the owners of these deposits are allowed to withdraw money anytime by writing a withdrawal slip or a cheque at the bank counter or from ATM centres using debit card.

ii. Time Deposits

It refers to deposits that are made for certain committed period of time. Banks pay higher interest on time deposits. These deposits can be withdrawn only after a specific time period by providing a written notice to the bank.

2. Advancing Loans

It refers to granting loans to individuals and businesses. Commercial banks grant loans in the form of overdraft, cash credit, and discounting bills of exchange.

(b) Secondary Functions

The secondary functions can be classified under three heads, namely, agency functions, general utility functions, and other functions.

1. Agency Functions: It implies that commercial banks act as agents of customers by performing various functions.

(i) Collecting Cheques

Banks collect cheques and bills of exchange on the behalf of their customers through clearing house facilities provided by the central bank.

(ii) Collecting Income

Commercial banks collect dividends, pension, salaries, rents, and interests on investments on behalf of their customers. A credit voucher is sent to customers for information when any income is collected by the bank.

(iii) Paying Expenses

Commercial banks make the payments of various obligations of customers, such as telephone bills, insurance premium, school fees, and rents. Similar to credit voucher, a debit voucher is sent to customers for information when expenses are paid by the bank.

(2) General Utility Functions: It implies that commercial banks provide some utility services to customers by performing various functions.

(i) Providing Locker Facilities

Commercial banks provide locker facilities to its customers for safe custody of jewellery, shares, debentures, and other valuable items. This minimizes the risk of loss due to theft at homes. Banks are not responsible for the items in the lockers.

(ii) Issuing Traveler's Cheques

Banks issue traveler's cheques to individuals for traveling outside the country. Traveler's cheques are the safe and easy way to protect money while traveling.

(iii) Dealing in Foreign Exchange

Commercial banks help in providing foreign exchange to businessmen dealing in exports and imports. However, commercial banks need to take the permission of the Central Bank for dealing in foreign exchange.

3. Transferring Funds

It refers to transferring of funds from one bank to another. Funds are transferred by means of draft, telephonic transfer, and electronic transfer.

4. Letter of Credit

Commercial banks issue letters of credit to their customers to certify their creditworthiness.

(i) Underwriting Securities

Commercial banks also undertake the task of underwriting securities. As public has full faith in the creditworthiness of banks, public do not hesitate in buying the securities underwritten by banks.

(ii) Electronic Banking

It includes services, such as debit cards, credit cards, and Internet banking.

(C) Other Functions:

(i) Money Supply

It refers to one of the important functions of commercial banks that help in increasing money supply. For instance, a bank lends ₹5 lakh to an individual and opens a demand deposit in the name of that individual. Bank makes a credit entry of Rs.5 lakh in that account. This leads to creation of demand deposits in that account. The point to be noted here is that there is no payment in cash. Thus, without printing additional money, the supply of money is increased.

(ii) Credit Creation

Credit Creation means the multiplication of loans and advances. Commercial banks receive deposits from the public and use these deposits to give loans. However, loans offered are many times more than the deposits received by banks. This function of banks is known as 'Credit Creation'.

(iii) Collection of Statistics:

Banks collect and publish statistics relating to trade, commerce and industry. Hence, they advice customers and the public authorities on financial matters.

Mechanism / Technique of Credit Creation by Commercial Banks

Bank credit refers to bank loans and advances. Money is said to be created when the banks, through their lending activities, make a net addition to the total supply of money in the economy. Likewise, money is said to be destroyed when the loans are repaid by the borrowers to the banks and consequently the credit already created by the banks is wiped out in the process.

Banks have the power to expand or contract demand deposits and they exercise this power through granting more or less loans and advances and acquiring other assets. This power of commercial bank to create deposits through expanding their loans and advances is known as credit creation.

Primary / Passive Deposit and Derived / Active Deposit

The modern banks create deposits in two ways. They are primary deposit and derived deposit. When a customer gives cash to the bank and the bank creates a book debt in his name called a deposit, it is known as a "primary deposit". But when such a deposit is created, without there being any prior payment of equivalent cash to the bank, it is called a 'derived deposit'.

Primary Deposits

- It is out of these primary deposits that the bank makes loans and advances to its customers.

- **The initiative is taken by the customers themselves. In this case, the role of the bank is passive.**
- **So these deposits are also called “Passive deposits”.**

Credit Creation literally means the multiplication of loans and advances. Every loan creates its own deposits. Central Bank insists the banks to maintain a ratio between the total deposits they create and the cash in their possession.

For the purpose of understanding, it is assumed that all banks are obliged to keep the ratio between cash and its deposits at a minimum of 20 percent.

1. The banks do not keep any excess reserves, in other words, it would exhaust possible avenues of income earning activities like giving loans etc. up to the maximum extent after attaining the minimum cash reserves.
2. There are no drains in the supply of money i.e., the public do not suddenly want to hold more ideal currency or withdraw from the time deposits.

Under the above assumptions, when a customer deposits a sum of Rs.1000 in a bank, the bank creates a deposit of Rs. 1000 in his favor. Bank deposits (Bank Money) have increased by Rs.1000. But, at this stage, there is no increase in the total supply of money with the public, because the above extra bank money of Rs.1000 is offset by the cash of Rs.1000 deposited in the bank.

The bank has now additional cash of Rs.1000 in its custody. Since it is required to keep only a cash reserve of 20 per cent, this means that Rs. 800 is excess cash reserve with it. According to the above assumption, the bank should lend out this Rs. 800 to the public. Suppose, it does so, and the debtor deposits the money in his own account with another bank B, Bank is creating a deposit of Rs. 800. Bank B then has also excess cash reserve of Rs. 640(800-160). It could, in its turn, lend out Rs. 640. This Rs. 640 will, in its turn find its way with, say Bank C; it will create a deposit of Rs. 640 and so on.

The total deposits will now grow into Rs. 1000+800+640+.....till ultimately the excess cash reserve peters out. It can be shown that when that stage is reached the total of the above will be Rs. 5000.

Money Multiplier = $1/20\% = 1/20/100 = 1/20 \times 100 = 5$
Credit creation is $1000 \times 5 = \text{Rs. } 5000$.

Role of Commercial Banks in Economic Development of a Country

1. Capital Formation

Banks play an important role in capital formation, which is essential for the economic development of a country. They mobilize the small savings of the people scattered over a wide area through their network of branches all over the country and make it available for productive purposes.

Now-a-days, banks offer very attractive schemes to induce the people to save their money with them and bring the savings mobilized to the organized money market. If the banks do not perform this function, savings either remains idle or used in creating other assets, (eg. gold) which are low in scale of plan priorities.

2. Creation of Credit

Banks create credit for the purpose of providing more funds for development projects. Credit creation leads to increased production, employment, sales and prices and thereby they bring about faster economic development.

3. Channelizing the Funds towards Productive Investment

Banks invest the savings mobilized by them for productive purposes. Capital formation is not the only function of commercial banks. Pooled savings should be allocated to various sectors of the economy with a view to increase the productivity. Then only it can be said to have performed an important role in the economic development.

4. Encouraging Right Type of Industries

Many banks help in the development of the right type of industries by extending loan to right type of persons. In this way, they help not only for industrialization of the country but also for the economic development of the country. They grant loans and advances to manufacturers whose

products are in great demand. The manufacturers in turn increase their products by introducing new methods of production and assist in raising the national income of the country. Sometimes, sub-prime lending is also clone. That is how there was an economic crisis in the year 2007-08 in the US.

5. Banks Monetize Debt

Commercial banks transform the loan to be repaid after a certain period into cash, which can be immediately used for business activities. Manufacturers and wholesale traders cannot increase their sales without selling goods on credit basis. But credit sales may lead to locking up of capital. As a result, production may also be reduced. As banks are lending money by discounting bills of exchange, business concerns are able to carryout the economic activities without any interruption.

6. Finance to Government

Government is acting as the promoter of industries in underdeveloped countries for which finance is needed for it. Banks provide long-term credit to Government by investing their funds in Government securities and short-term finance by purchasing Treasury Bills. RBI has given Rs. 68,000 crores to the government of India in the year 2018-19, this is 99% the RBI's surplus.

7. Employment Generation

After the nationalization of big banks, banking industry has grown to a great extent. Bank's branches are opened frequently, which leads to the creation of new employment opportunities.

8. Banks Promote Entrepreneurship

In recent days, banks have assumed the role of developing entrepreneurship particularly in developing countries like India by inducing new entrepreneurs to take up the well-formulated projects and provision of counseling services like technical and managerial guidance.

Banks provide 100% credit for worthwhile projects, which is also technically feasible and economically viable. Thus commercial banks help for the development of entrepreneurship in the country.

Non-Banking Financial Institution (NBFI)

A non-banking financial institution (NBFI) or non-bank financial company (NBFC) is a financial institution that does not have a full banking license or is not supervised by the central bank.

The NBFIs do not carry on pure banking business, but they will carry on other financial transactions. They receive deposits and give loans. They mobilize people's savings and use the funds to finance expenditure on investment activities. In short, they are institutions which undertake borrowing and lending. They operate in both the money and the capital markets.

NBFIs can be broadly classified into two categories. Viz., (1) Stock Exchange; and (2) Other Financial institutions. Under the latter category comes Finance Companies, Finance Corporations, Chit Funds, Building Societies, Issue Houses, Investment Trusts and Unit Trusts and Insurance Companies.

Central Bank

A central bank, reserve bank, or monetary authority is an institution that manages a state's currency, money supply, and interest rates. Central banks also usually oversee the commercial banking system of their respective countries.

Functions of Central Bank (Reserve Bank of India)

The Reserve Bank of India (RBI) is India's central banking institution, which controls the monetary policy of the Indian rupee. It commenced its operations on 1 April 1935 in accordance with the Reserve Bank of India Act, 1934. The original share capital was divided into shares of Rs.100 each fully paid, which were initially owned entirely by private shareholders. Following India's independence on 15 August 1947, the RBI was nationalised on 1 January 1949.

1. **Monetary Authority:** It controls the supply of money in the economy to stabilize exchange rate, maintain healthy balance of payment, attain financial stability, control inflation, strengthen banking system.
2. **The issuer of currency:** The objective is to maintain the currency and credit system of the country. It is the sole authority to issue currency. It also takes action to control the circulation of fake currency.
3. **The issuer of Banking License:** As per Sec 22 of Banking Regulation Act, every bank has to obtain a banking license from RBI to conduct banking business in India.

RESERVE BANK OF INDIA

History

- Formed on April 1, 1935 in accordance with the RBI Act, 1934
- Nationalized on January 1, 1949 (Fully owned by GOI)
- Headquarter moved from Calcutta to Mumbai in 1937
- Osborne Smith was the first Governor of RBI

Administration

- It is the Central Bank/ Regulator for all bank in India
- Also called "Lender of Last Resort"
- Governors and 4 Deputy Governors along with a central board of directors appointed by the GOI.

Functions

- Issues currency
- Banker to the government {It collects receipts of funds and makes payments on behalf of the government}
- Regulator of Indian Banking system
- Custodian of Forex
- Controller of credit

The process of issuing paper currency was started in the 18th century. Private Banks such as the bank of Bengal the bank of Bombay and the Bank of Madras – first printed paper money.

The first rupee was introduced by Sher Shah Suri based on a ratio of 40 copper pieces (paisa) per rupee. The name was derived from the Sanskrit word Raupya, meaning silver. Each banknote has its amount written in 17 languages

(English and Hindi on the front and 15 other on the back) illustrating the diversity of the country.

4. **Banker to the Government:** It acts as banker both to the central and the state governments. It provides short-term credit. It manages all new issues of government loans, servicing the government debt outstanding and nurturing the market for government securities. It advises the government on banking and financial subjects.
5. **Banker's Bank:** RBI is the bank of all banks in India as it provides loan to banks, accept the deposit of banks, and rediscount the bills of banks.
6. **Lender of last resort:** The banks can borrow from the RBI by keeping eligible securities as collateral at the time of need or crisis, when there is no other source.
7. **Act as clearing house:** For settlement of banking transactions, RBI manages 14 clearing houses. It facilitates the exchange of instruments and processing of payment instructions.
8. **Custodian of foreign exchange reserves:** It acts as a custodian of FOREX. It administers and enforces the provision of Foreign Exchange Management Act (FEMA), 1999. RBI buys and sells foreign currency to maintain the exchange rate of Indian rupee v/s foreign currencies.
9. **Regulator of Economy:** It controls the money supply in the system, monitors different key indicators like GDP, Inflation, etc.
10. **Managing Government securities:** RBI administers investments in institutions when they invest specified minimum proportions of their total assets/liabilities in government securities.
11. **Regulator and Supervisor of Payment and Settlement Systems:** The Payment and Settlement Systems Act of 2007 (PSS Act) gives RBI oversight authority for the payment and settlement systems in the country. RBI focuses on the development and functioning of safe, secure and efficient payment and settlement mechanisms.

12. **Developmental Role:** This role includes the development of the quality banking system in India and ensuring that credit is available to the productive sectors of the economy. It provides a wide range of promotional functions to support national objectives. It also includes establishing institutions designed to build the country's financial infrastructure. It also helps in expanding access to affordable financial services and promoting financial education and literacy.
13. **Publisher of monetary data and other data:** RBI maintains and provides all essential banking and other economic data, formulating and critically evaluating the economic policies in India. RBI collects, collates and publishes data regularly.
14. **Exchange manager and controller:** RBI represents India as a member of the International Monetary Fund [IMF]. Most of the commercial banks are authorized dealers of RBI.
15. **Banking Ombudsman Scheme:** RBI introduced the Banking Ombudsman Scheme in 1995. Under this scheme, the complainants can file their complaints in any form, including online and can also appeal to the Ombudsman against the awards and the other decisions of the Banks.
16. **Banking Codes and Standards Board of India:** To measure the performance of banks against Codes and standards based on established global practices, the RBI has set up the Banking Codes and Standards Board of India (BCSBI).

Credit Control Measures

Credit control is the primary mechanism available to the Central banks to realize the objectives of monetary management. The RBI is much better placed than many of credit control. The statutory basis for the control of the credit system by the Reserve Bank is embodied in the Reserve Bank of India Act, 1934 and the Banking Regulation Act, 1949.

Credit Control Measures

General (Quantitative)

1. Bank Rate
2. Open Market Operations

Selective (Quantitative)

1. Rationing of Credit
2. Direct Action

3. Variable Cash Reserve Ratio

3. Moral suasion

4. Publicity

5. Regulation of Consumer' Credit

6. Marginal Requirements

Methods of Credit Control

I. Quantitative or General Methods:

1. Bank Rate Policy:

The bank rate is the rate at which the Central Bank of a country is prepared to re-discount the first class securities. It means the bank is prepared to advance loans on approved securities to its member banks. As the Central Bank is only the lender of the last resort the bank rate is normally higher than the market rate. For example: If the Central Bank wants to control credit, it will raise the bank rate. As a result, the deposit rate and other lending rates in the money-market will go up. Borrowing will be discouraged, and will lead to contraction of credit and vice versa.

2. Open Market Operations:

In narrow sense, the Central Bank starts the purchase and sale of Government securities in the money market.

In Broad Sense, the Central Bank purchases and sells not only Government securities but also other proper eligible securities like bills and securities of private concerns. When the banks and the private individuals purchase these securities they have to make payments for these securities to the Central Bank.

3. Variable Reserve Ratio:

a) Cash Reserves Ratio:

Under this system the Central Bank controls credit by changing the Cash Reserves Ratio. For example, if the Commercial Banks have excessive cash reserves on the basis of which they are creating too much of credit, this will be harmful for the larger interest of the economy. So it will raise the cash reserve ratio which the Commercial Banks are required to maintain with the Central Bank.

Similarly, when the Central Bank desires that the Commercial Banks should increase the volume of credit in order to bring about an economic revival in the economy. The central Bank will lower down the Cash Reserve Ratio with a view to expand the lending capacity of the Commercial Banks.

Variable Cash Reserve Ratio as an objective of monetary policy was first suggested by J.M. Keynes. It was first followed by Federal Reserve System in United States of America. The commercial banks as per the statute has to maintain reserves based on their demand deposit and fixed deposit with central bank is called as Cash Reserve Ratio.

If the CRR is high, the commercial bank's capacity to create credit will be less and if the CRR is low, the commercial bank's capacity to create credit will be high.

b) Statutory Liquidity Ratio:

Statutory Liquidity Ratio (SLR) is the amount which a bank has to maintain in the form of cash, gold or approved securities. The quantum is specified as some percentage of the total demand and time liabilities (i.e., the liabilities of the bank which are payable on demand anytime, and those liabilities which are accruing in one month's time due to maturity) of a bank.

II. Qualitative or Selective Method of Credit Control:

The qualitative or the selective methods are directed towards the diversion of credit into particular uses or channels in the economy. Their objective is mainly to control and regulate the flow of credit into particular industries or businesses. The following are the frequent methods of credit control under selective method:

1. Rationing of Credit
2. Direct Action
3. Moral Persuasion
4. Method of Publicity
5. Regulation of Consumer's Credit
6. Regulating the Marginal Requirements on Security Loans

1. Rationing of Credit

This is the oldest method of credit control. Rationing of credit as an instrument of credit control was first used by the Bank of England by the end of the 18th Century. It aims to control and regulate the purposes for which credit is granted by commercial banks. It is generally of two types.

a) The variable portfolio ceiling: It refers to the system by which the central bank fixes ceiling or maximum amount of loans and advances for every commercial bank.

b) The variable capital asset ratio: It refers to the system by which the central bank fixes the ratio which the capital of the commercial bank should have to the total assets of the bank.

2. Direct Action

Direct action against the erring banks can take the following forms.

a) The central bank may refuse to altogether grant discounting facilities to such banks.

b) The central bank may refuse to sanction further financial accommodation to a bank whose existing borrowing are found to be in excess of its capital and reserves.

c) The central bank may start charging penal rate of interest on money borrowed by a bank beyond the prescribed limit.

3. Moral Suasion

This method is frequently adopted by the Central Bank to exercise control over the Commercial Banks. Under this method Central Bank gives advice, then requests. and persuades the Commercial Banks to co-operate with the Central Bank in implementing its credit policies.

4. Publicity

Central Bank in order to make their policies successful, take the course of the medium of publicity. A policy can be effectively successful only when an effective public opinion is created in its favour.

5. Regulation of Consumer's Credit:

The down payment is raised and the number of installments reduced for the credit sale.

6. Changes in the Marginal Requirements on Security Loans:

This system is mostly followed in U.S.A. Under this system, the Board of Governors of the Federal Reserve System has been given the power to prescribe margin requirements for the purpose of preventing an excessive use of credit for stock exchange speculation.

This system is specially intended to help the Central Bank in controlling the volume of credit used for speculation in securities under the Securities Exchange Act, 1934.

The Repo Rate and the Reverse Repo Rate are the frequently used tools with which the RBI can control the availability and the supply of money in the economy. RR is always greater than RRR in India

Repo Rate: (RR)	Reverse Repo Rate (RRR)
<p>The rate at which the RBI is willing to lend to commercial banks is called Repo Rate. Whenever banks have any shortage of funds they can borrow from the RBI, against securities. If the RBI increases the Repo Rate, it makes borrowing expensive for banks and vice versa. As a tool to control inflation, RBI increases the Repo Rate, making it more expensive for the banks to borrow from the RBI. Similarly, the RBI will do the exact opposite in a deflationary environment.</p>	<p>The rate at which the RBI is willing to borrow from the commercial banks is called reverse repo rate. If the RBI increases the reverse repo rate, it means that the RBI is willing to offer lucrative interest rate to banks to park their money with the RBI. This results in a decrease in the amount of money available for banks customers as banks prefer to park their money with the RBI as it involves higher safety. This naturally leads to a higher rate of interest which the banks will demand from their customers for lending money to them.</p>

Reserve Bank of India and Rural Credit

In a developing economy like India, the Central bank of the country cannot confine itself to the monetary regulation only, and it is expected that it

should take part in development function in all sectors especially in the agriculture and industry.

Role of RBI in agricultural credit

RBI has been playing a very vital role in the provision of agricultural finance in the country. The Bank's responsibility in this field had been increased due to the predominance of agriculture in the Indian economy and the inadequacy of the formal agencies to cater to the huge requirements of the sector. In order to fulfill this important role effectively, the RBI set up a separate Agriculture Credit Department. However, the volume of informal loans has not declined sufficiently.

Functions of Agriculture Credit Department:

- a. To maintain an expert staff to study all questions on agricultural credit;
- b. To provide expert advice to Central and State Government, State Co-operative Banks and other banking activities.
- c. To finance the rural sector through eligible institutions engaged in the business of agricultural credit and to co-ordinate their activities.

The duties of the RBI in agricultural credit were much restricted as it had to function only in an ex-officio capacity being the Central Bank of the country. It could not lend directly to the farmers, but the supply of rural credit was done through the mechanism of refinance with institutions specializing in rural credit. Primary societies may borrow from Central Co-operative Bank, and the latter may borrow from the apex or the State Co-operative Bank, which in its turn might get accommodation facilities from the RBI.

The RBI was providing medium-term loans also for a period exceeding 15 months to 5 years for reclamation of land, construction of irrigation works, purchase of machinery, etc.

The Reserve Bank of India was also providing long-term loans to finance permanent changes in land and also for the redemption of old debts.

With the establishment of National Bank for Agriculture and Rural Development (NABARD), all the functions of the RBI relating to agricultural credit had been taken over and looked after by NABARD since 1982. Since then, all activities relating to rural credit are entirely looked after by NABARD.

The Agricultural Refinance Development Corporation (ARDC)

Farmers in India require mainly medium term and long term loans and they face a lot of difficulties in getting them. The only organization providing long term credit is Land Development Banks which have lagged behind and recorded only limited success. The credit requirements of the agricultural sector are increasing year after year. With the aim of bridging the gap in agricultural finance and to extend credit for projects involving agricultural development, an organization called the Agricultural Refinance Development Corporation (ARDC) was established by an Act of Parliament and it started functioning from July 1, 1963.

Objectives of the ARDC:

- i. To provide necessary funds by way of refinance to eligible institutions such as the Central Land Development Banks, State Co-operative Banks, and Scheduled banks.
- ii. To subscribe to the debentures floated by the Central Land Development banks, State Co-operative Banks, and Scheduled banks, provided they were approved by the RBI.

Regional Rural Banks (RRBs)

One of the important points of the 20 points economic programme of Mrs. Indira Gandhi during emergency was the liquidation of rural indebtedness by stages and provide institutional credit to farmers and artisans in rural areas. It was in pursuance of this aspect of the New Economic programme that the Government of India setup Regional Rural Banks (RRBs) on 1975. The share capital of RRB is subscribed by the Central Government (50%), the State Government concerned (15%), and the sponsoring commercial bank (35%).

The main objective of the RRBs is to provide credit and other facilities particularly to the small and marginal farmers, agricultural labourers, artisans and small entrepreneurs so as to develop agriculture, trade, commerce, industry and other productive activities in the rural areas.

Concessions to RRBs

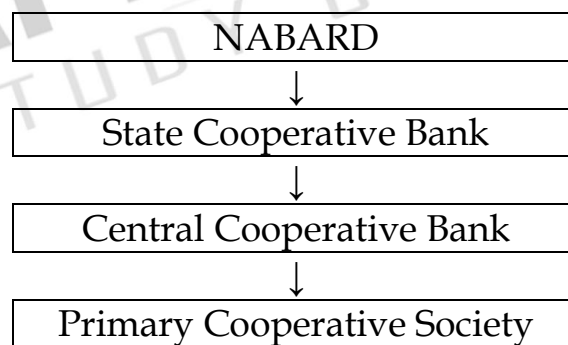
From the beginning, the sponsor banks have continued to provide managerial and financial assistance to RRBs and also other concessions such as lower rate of interest (8.5 per cent) on the latter's borrowings from sponsor banks. Further, the cost of staff deputed to RRBs and training expenses of RRB staff are borne by the sponsor banks.

The RBI has been granting many concessions to RRBs:

- a. They are allowed to maintain cash reserve ratio at 3 per cent and statutory liquidity ratio at 25 per cent; and
- b. They also provide refinance facilities through NABARD.

NABARD and its role in Agricultural credit

Since its inception, RBI has shown keen interest in agricultural credit and maintained a separate department for this purpose. RBI extended short-term seasonal credit as well as medium-term and long-term credit to agriculture through State level co-operative banks and Land Development banks.



Three Tier Cooperative Credit
Structure

At the same time, RBI has also set up the Agricultural Refinance Development Corporation (ARDC) to provide refinance support to the banks to promote programmes of agricultural development, particularly those requiring term credit. With the widening of the role of bank credit from "agricultural development" to "rural development" the Government proposed to have a more broad-based organization at the apex level to extend support

and give guidance to credit institutions in matters relating to the formulation and implementation of rural development programmes.

A National Bank for Agriculture and Rural Development (NABARD), was therefore, set up in July 1982 by an Act of parliament to take over the functions of ARDC and the refinancing functions of RBI in relation to co-operative banks and RRBs. NABARD is linked organically with the RBI by the latter contributing half of its share capital the other half being contributed by the Government of India(GOI). GOI nominates three of its Central Board Directors on the board of NABARD. A Deputy Governor of RBI is appointed as Chairman of NABARD.

Functions of NABARD

NABARD has inherited its apex role from RBI i.e, it is performing all the functions performed by RBI with regard to agricultural credit.

- i. NABARD acts as a refinancing institution for all kinds of production and investment credit to agriculture, small-scale industries, cottage and village industries, handicrafts and rural crafts and real artisans and other allied economic activities with a view to promoting integrated rural development.
- ii. It provides short-term, medium-term and long-term credits to state co-operative Banks (SCBs), RRBs, LDBs and other financial institutions approved by RBI.
- iii. NABARD gives long-term loans (upto 20 Years) to State Government to enable them to subscribe to the share capital of co-operative credit societies.
- iv. NABARD gives long-term loans to any institution approved by the Central Government or contribute to the share capital or invests in securities of any institution concerned with agriculture and rural development.
- v. NABARD has the responsibility of co-ordinating the activities of Central and State Governments, the Planning Commission (now NITI Aayog) and other all India and State level institutions entrusted with the development

of small scale industries, village and cottage industries, rural crafts, industries in the tiny and decentralized sectors, etc.

- vi. It has the responsibility to inspect RRBs and co-operative banks, other than primary co-operative societies.
- vii. It maintains a Research and Development Fund to promote research in agriculture and rural development

Reserve bank of India and industrial finance

Though industries get finance from commercial banks, the quantum and the term will be very much limited generally. Commercial banks lend for short term only, as they get only short-term deposits from the public. Further lending to industries is only a fragment of the total lending by the banks.

Hence, there is a need and urgency of establishing long-term credit facilities to industries. The institutional set-up in India for financing in India for financing and promoting industries are as follows

All-India Level Institutions:

1. Industrial Finance Corporation of India (IFCI)

This was first in the chain of establishment of financial corporations to provide financial assistance for industrial development. This was established on July 1, 1948 under the Act of the Parliament. IFCI provides assistance to the industrial concerns in the following ways:

- i) Long-term loans; both in rupees and foreign currencies.
- ii) Underwriting of equity, preference and debenture issues.
- iii) Subscribing to equity, preference and debenture issues.
- iv) Guaranteeing the deferred payments in respect of machinery imported from abroad or purchased in India; and
- v) Guaranteeing of loans raised in foreign currency from foreign financial institutions.

Financial assistance of IFCI can be availed by any Limited Company in the public, private or joint sector, or by a co-operative society incorporated in India, which is engaged or proposes to be engaged in the specified industrial

activities. Such financial assistance will be available for the setting up of new industrial projects and also for the expansion diversification, renovation or modernisation of existing ones. The IFCI also provides financial assistance on concessional terms for setting up industrial projects in industrially less developed districts in the States or Union Territories notified by the Central Government,

The IFCI raises its resources by way of (a) issue of bonds in the market; (b) borrowing from Industrial Development Bank of India and the Central Government; (c) foreign credit secured from foreign financial institutions and borrowings in the international capital markets.

3. Industrial Credit and Investment Corporation of India (ICICI)

Functions of ICICI

- **Assistance to industries**
- **Provision of foreign currency loans**
- **Merchant banking**
- **Letter of credit**
- **Project promotion**
- **Housing loans**
- **Leasing operations**

This was set up on 5th January 1955 as a joint-stock company on the advice given by a three-man mission sponsored by the World Bank and The Government of USA to the Government of India. The principal purpose of this institution is to channelize the World Bank funds to industry in India and also to help build up a capital market. Initially the capital of ICICI was held by private companies, institutions and individuals. But now, a very large part of its equity capital is held by public sector institutions, such as banks, LIC, GIC and its subsidiaries, as 'this private institution was nationalized.

The significant feature of the operations of ICICI is the foreign currency loans sanctioned by this institution to industries. Since its inception, nearly 50 per cent of its disbursement had been in foreign currencies. This is possible because of the facility it enjoys of raising funds in foreign currencies. The World Bank has been the single largest source of such funds. Since 1973, the

ICICI has entered the international capital markets also for raising foreign currency loans.

The major portion of its rupee resources is raised by way of debentures in the capital market. The ICICI also borrows from the Industrial Development Bank of India and the Government. The major portion of its assistance has gone to the private sector.

Industrial Development Bank of India (IDBI)

The Industrial Development Bank of India has been conceived with the primary object of creating an apex institution to co-ordinate the activities of other financial institutions, including banks. The Development Bank was a wholly owned subsidiary of the Reserve Bank of India upto February 15, 1976. It was delinked from the RBI with effect from February 16, 1976 and made an autonomous corporation fully owned by the Government of India.

Functions of IDBI: The functions of IDBI fall into two groups (i) Assistance to other financial institutions; and (ii) Direct assistance to industrial concerns either on its own or in participation with other institutions. The IDBI can provide refinance in respect of term loans to industrial concerns given by the IFC, the SFCs, other financial institutions notified by the Government, scheduled banks and state cooperative banks.

A special feature of the IDBI is the provision for the creation of a special fund known as the Development Assistance Fund. The fund is intended to provide assistance to industries which require heavy investments with low anticipated rate of return. Such industries may not be able to get assistance in the normal course. The financing of exports was also undertaken by the IDBI till the establishment of EXIM BANK in March, 1982.

State Level Institutions

1. State Financial Corporation (SFCs)

The government of India passed in 1951 the State Financial Corporations Act and SFCs were set up in many states. The SFCs are mainly intended for the development of small and medium industrial units within their respective states. However, in some cases they extend to neighbouring states as well.

The SFCs provide loans and underwriting assistance to industrial units having paid-up capital and reserves not exceeding Rs. 1 crore. The maximum amount that can be sanctioned to an industrial concern by SFC is Rs. 60 lakhs.

SFCs depend upon the IDBI for refinance in respect of the term loans granted by them. Apart from these, the SFCs can also make temporary borrowings from the RBI and borrowings from IDBI and by the sale of bonds.

State Industrial Development Corporations (SIDCOs)

The Industrial Development Corporations have been set up by the state governments and they are wholly owned by them. These institutions are not merely financing agencies; they are entrusted with the responsibility of accelerating the industrialization of their states.

SIDCOs provide financial assistance to industrial concerns by way of loans guarantees and underwriting of or direct subscriptions to shares and debentures. In addition to these, they undertake various promotional activities, such as conducting techno-economic surveys, project identification, preparation of feasibility studies and selection and training of entrepreneurs. They also promote joint sector projects in association with private promoter in such type of projects. SIDCOs take 26 percent, private co-promoter takes 25 percent of the equity, and the rest is offered to the investing public. SIDCOs undertake the development of industrial areas by providing all infrastructural facilities and initiation of new growth centers. They also administer various State government incentive schemes. SIDCOs get refinance facilities form IDBI. They also borrow through bonds and accept deposits.

Monetary Policy

Monetary Policy is the macroeconomic policy being laid down by the Central Bank towards the management of money supply and interest rate. It is the demand side economic policy used by the government of a country to achieve macroeconomic objectives like inflation, consumption, growth and liquidity. The monetary policy gained its significance after the World War II, thanks to the initiation made by Milton Friedman, who is associated with the doctrine of "monetarism" and who received Nobel Prize in 1976. He boldly announced in his book "Monetary History of the United States, 1867 - 1960" that the Great Depression of the 1930's was largely the outcome of the bungling monetary policies of the Federal Reserve System.

Monetary Policy: Expansionary Vs. Contractionary

Expansionary policy is cheap money policy when a monetary authority uses its tools to stimulate the economy. An expansionary policy maintains short-term interest rates at a lower than usual rate or increases the total supply of money in the economy more rapidly than usual. It is traditionally used to try to combat unemployment by lowering interest rates in the hope that less expensive credit will entice businesses into expanding. This increases aggregate demand (the overall demand for all goods and services in an economy), which boosts short-term growth as measured by gross domestic product (GDP) growth.

The Contractionary monetary policy is dear money policy, which maintains short-term interest rates higher than usual or which slows the rate of growth in the money supply or even shrinks it. This slows short-term economic growth and lessens inflation. Contractionary monetary policy can lead to increased unemployment and depressed borrowing and spending by consumers and businesses, which can eventually result in an economic recession if implemented too vigorously.

Objectives of Monetary Policy

The monetary policy in developed economies has to serve the function of stabilization and maintaining proper equilibrium in the economic system. But in case of underdeveloped countries, the monetary policy has to be more dynamic so as to meet the requirements of an expanding economy by creating suitable conditions for economic progress. It is now widely recognized that monetary policy can be a powerful tool of economic transformation.

The specific objectives of monetary policy are

- 1. Neutrality of Money**
- 2. Stability of Exchange Rates**
- 3. Price Stability**
- 4. Full Employment**
- 5. Economic Growth**
- 6. Equilibrium in the Balance of Payments**

1. Neutrality of Money

Economists like Wicksteed, Hayek and Robertson are the chief exponents of neutral money. They hold the view that monetary authority should aim at neutrality of money in the economy. Monetary changes could be the root cause of all economic fluctuations. According to neutralists, the monetary change causes distortion and disturbances in the proper operation of the economic system of the country.

2. Exchange Rate Stability

Exchange rate stability was the traditional objective of monetary authority. This was the main objective under Gold Standard among different countries. When there was disequilibrium in the balance of payments of the country, it was automatically corrected by movements. It was popularly known as “Expand Currency and Credit when gold is coming in; contract currency and credit when gold is going out.” This system will correct the disequilibrium in the balance of payments and exchange rate stability will be maintained.

It must be noted that if there is instability in the exchange rates, it would result in outflow or inflow of gold resulting in unfavorable balance of payments. Therefore, stable exchange rates are advocated.

3. Price Stability

Economists like Crustave Cassel and Keynes suggested price stabilization as a main objective of monetary policy. Price stability is considered the most genuine objective of monetary policy. Stable prices repose public confidence. It promotes business activity and ensures equitable distribution of income and wealth. As a consequence, there is general wave of prosperity and welfare in the community.

But it is admitted that price stability does not mean ‘price rigidity’ or price stagnation’. A mild increase in the price level provides a tonic for economic growth. It keeps all virtues of a stable price.

4. Full Employment

During world depression, the problem of unemployment had increased rapidly. It was regarded as socially dangerous, economically wasteful and morally deplorable. Thus, full employment was considered as the main goal of monetary policy. With the publication of Keynes' General Theory of Employment, Interest and Money in 1936, the objective of full employment gained full support as the chief objective of monetary policy.

5. Economic Growth

Economic growth is the process whereby the real per capita income of a country increases over a long period of time. It implies an increase in the total physical or real output, production of goods for the satisfaction of human wants.

Therefore, monetary policy should promote sustained and continuous economic growth by maintaining equilibrium between the total demand for money and total production capacity and further creating favourable conditions for saving and investment. For bringing equality between demand and supply, flexible monetary policy is the best course.

6. Equilibrium in the Balance of Payments

Equilibrium in the balance of payments is another objective of monetary policy which emerged significant in the post war years. This is simply due to the problem of international liquidity on account of the growth of world trade at a more faster speed than the world liquidity.

It was felt that increasing of deficit in the balance of payments reduces the ability of an economy to achieve other objectives. As a result, many less developed countries have to curtail their imports which adversely affects development activities. Therefore, monetary authority makes efforts to maintain equilibrium in the balance of payments.

Recent Advancements in Banking Sector

E- Banking

Online banking, also known as internet banking, is an electronic payment system that enables customers of a bank or other financial institution

to conduct a range of financial transactions through the financial institution's website. The online banking system typically connects to or be part of the core banking system operated by a bank and is in contrast to branch banking which was the traditional way customers accessed banking services.

Today, "virtual banks" (or "direct banks") have only an internet presence, which enables them to lower costs than traditional brick-and-mortar banks.

RTGS and NEFT

Inter Bank Transfer enables electronic transfer of funds from the account of the remitter in one Bank to the account of the beneficiary maintained with any other Bank branch. There are two systems of Inter Bank Transfer - RTGS and NEFT. Both these systems are maintained by RBI. NEFT operates in half hourly batches. Currently there are twenty three settlements from 8 am to 7 pm on all working days including working Saturdays. Therefore, the beneficiary can expect to get the credit for the transactions put through between 8 am to 5.30 pm on all working days including working Saturdays on the same day. For transactions settled in the 6.30 and 7 pm batches on all working days including working Saturdays, the credit will be afforded either on the same day or on the next working day.

NEFT	RTGS
National electronic Fund Transfer	Real Time Gross Settlement
Transactions happens in batches hence slow	Transactions Happens in real time hence fast
Timings : 8:00 am to 6:30 pm (12: 30 pm on Saturday)	Timings : 9:00 am to 4:30 pm (1:30 pm on Saturday)
No minimum limit	Minimum amount for RTGS transfer is ₹ 2 lakhs

ATM (Automated Teller Machine)

ATMs transformed the bank tech system when they were first introduced in 1967. The next revolution in ATMs is likely to involve contactless payments. Much like Apple Pay or Google Wallet, soon we will be able to conduct contactless ATM transactions using a smartphone.

Some ATM innovations are already available overseas. For example, biometric authentication is already used in India, and its recognition is in place at Qatar National Bank ATMs. These technologies can help overall bank security by protecting against ATM hacks.

Paytm

Payments Bank. In August 2015, Paytm received a license from RBI to launch a payments bank. The Paytm Payments Bank is a separate entity in which founder Vijay Shekhar Sharma will hold 51% share, One97 Communications holds 39% and 10% will be held by a subsidiary of One97 and Sharma.

Debit card and Credit Card

A Debit card is a card allowing the holder to transfer money electronically from their bank account when making a purchase.

A credit card is a payment card issued to users (cardholders) to enable the cardholder to pay a merchant for goods and services based on the cardholder's promise to the card issuer to pay them for the amounts so paid plus the other agreed charges. The card issuer (usually a bank) creates a revolving account and grants a line of credit to the cardholder, from which the cardholder can borrow money for payment to a merchant or as a cash advance. In other words, credit cards combine payment services with extensions of credit. Complex fee structures in the credit card industry may limit customers' ability to shopping.

Recent Issues

Once the borrower fails to make interest or principal payments for 90 days the loan is considered to be a non-performing asset (NPA). NPAs are problematic for financial institutions since they depend on interest payments for income. As on now the size of NPAs is estimated to be around 10 lakh crores. As a result, the banks do not have adequate capital. Hence the Government (of India) is forced to infuse capital to the banks by using poor tax - payers money. Already more than a sum of Rs. 2 lakh crores have been injected. During 2018 - 19, the GOI has infused Rs. 68,000 crores into the banking system. Thus the NPAs ultimately affect the common people.

Merger of Banks

Union Cabinet decided to merge all the remaining five associate banks of State Bank Group with State Bank of India in 2017. After the Parliament passed the merger Bill, the subsidiary banks have ceased to exist.

Five associates and the Bharatiya Mahila Bank have become the part of State Bank of India (SBI) beginning April 1, 2017. This has placed State Bank of India among the top 50 banks in the world. The five associate banks that were merged are State Bank of Bikaner and Jaipur (SBBJ), State Bank of Hyderabad (SBH), State Bank of Mysore (SBM), State Bank of Patiala (SBP) and State Bank of Travancore (SBT). The other two Associate Banks namely State Bank of Indore and State Bank of Saurashtra had already been merged with State Bank of India. After the merger, the total customer base of SBI increased to 37 crore with a branch network of around 24,000 and around 60,000 ATMs across the country.

Money Market

Money market is the mechanism through which short term funds are loaned and borrowed. It designates financial institutions which handle the purchase, sale and transfer of short term credit instruments. Commercial banks, acceptance houses, Non Banking Financial Institutions and the Central Bank are the institutions catering to the requirements of short term funds in the money Market.

Capital Market

Capital Market is a part of financial system which is concerned with raising capital by dealing in shares, bonds and other long term investments.

The market where investment instruments like bonds, equities and mortgages are traded is known as the capital market

Demonisation

Demonitisation is the act of stripping a currency unit of its status as legal tender. It occurs whenever there is a change of national currency. The current form or forms of money is pulled from circulation, often to be replaced with new coins or notes. On 8 November 2016, the Indian Prime Minister Mr.

Narendra Modi announced the demonetization of all Rs. 500 and Rs. 1000 bank notes of the Mahatma Gandhi Series. However, more than 99% of those currencies came back to the RBI.

Objectives of Demonetisation

- 1. Removing Black Money from the country.**
- 2. Stopping of Corruption.**
- 3. Stopping Terror Funds.**
- 4. Curbing Fake Notes**

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Chapter - 7

International Economics

“Economies are linked internationally through trade in goods and through financial markets”.

- Dornbusch, Fischer and Startz

Introduction:

The subject ‘International Economics’ evolved from a simple theory of international trade was formulated to answer a few basic questions. The subject first originated in Western Europe on account of increasing importance of foreign trade in that part of the world. The contributions of classical economists like Adam Smith, David Ricardo, F.W. Taussig, Haberler, J.S.Mill and Bela Balassa shaped the subject matter of International Economics.

International Economics studies the entire range of international economic transactions that consist of not only trade in goods and services but also capital flows, technology transfer, the rate of exchange, balance of payments, and issues relating to tariffs, protection, free trade, investment flows, role of fiscal and monetary policies pursued by individual countries.

Meaning of International Economics

International Economics is that branch of economics which is concerned with the exchange of goods and services between two or more countries. Hence the subject matter is mainly related to foreign trade.

In other words, International Economics is a specialized field of Economics which deals with the economic interdependence among countries and studies the effects of such interdependence and the factors that affect it.

Subject Matter of International Economics

The subject matter of International Economics includes large number of segments which are classified into the following parts.

1. Pure Theory of Trade

This component explains the causes for foreign trade, composition, direction and volume of trade, determination of the terms of trade and exchange rate, issues related to balance of trade and balance of payments.

2. Policy Issues

Under this part, policy issues such as free trade vs. protection, methods of regulating trade, capital and technology flows, use of taxation, subsidies and dumping, exchange control and convertibility, foreign aid, external borrowings and foreign direct investment, measures of correcting disequilibrium in the balance of payments etc are covered.

3. International Cartels and Trade Blocs

This part deals with the economic integration in the form of international cartels, customs unions, monetary unions, trade blocs, economic unions and the like. It also discusses the operation of Multinational Corporations (MNCs).

4. International Financial and Trade Regulatory Institutions

The financial institutions like International Monetary Fund IMF, IBRD, WTO etc which influence international economic transactions and relations shall also be the part of international economics.

Meaning of Trade

Trade is one of the powerful forces of economic integration. The term 'trade' means exchange of goods, wares or merchandise among people.

Trade is of two types. They are:

- a. Internal Trade and
- b. International Trade.

Internal Trade

It refers to the exchange of goods and services within the political and geographical boundaries of a nation. It is a trade within a country. This is also known as 'domestic trade' or 'home trade' or 'intra-regional trade'.

International Trade

It refers to the trade or exchange of goods and services between two or more countries. In other words, it is a trade among different countries or trade across political boundaries. It is also called as 'external trade' or 'foreign trade' or 'inter-regional trade'.

Differences between 'Internal Trade' and 'International Trade'

S.No	Internal Trade	International Trade
1.	Trade takes place between different individuals and firms within the same nation.	Trade takes place between different individuals and firms in different countries.
2.	Labour and capital move freely from one region to another.	Labour and capital do not move easily from one nation to another.
3.	There will be free flow of goods and services since there are no restrictions.	Goods and services do not easily move from one country to another since there are a number of restrictions like tariff and quota.
4.	There is only one common currency.	There are different currencies.
5.	The physical and geographical conditions of a country are more or less similar.	There are differences in physical and geographical conditions of the two countries.
6.	Trade and financial regulations are more or less the same.	Trade and financial regulations such as interest rate, trade laws differ between countries.
7.	There is no difference in political affiliations, customs and habits of the people and government policies.	Differences are pronounced in political affiliations, habits and customs of the people and government policies.

Theories of International Trade

The Classical Theory of International Trade

Introduction

Adam Smith (1776) developed the theory of absolute cost advantage. But it was David Ricardo who formulated an explicit and precise theory, namely, the theory of comparative cost advantage, which was later improved

and refined by the economists like J.S Mill, Cairnes, Bastable, Taussig and Haberler. We shall first discuss the Adam Smith's theory of absolute cost advantage.

Classical Trade Theories		
Mercantilism (pre - 16th century)	Free Trade theories	Free Trade refined
<ul style="list-style-type: none"> • Takes an us-versus - them view of trade • Other country's gain is our country's loss 	<ul style="list-style-type: none"> • Absolute Advantage (Adam Smith, 1776) • Comparative Advantage (David Ricardo, 1817) • Specialization of production and free flow of goods benefit all trading partner's economies 	<ul style="list-style-type: none"> • Factor - proportions (Heckscher -Ohlin, 1919) • International Product life cycle (Ray Vernon, 1966)

Adam Smith's Theory of Absolute Cost Advantage

Adam Smith argued that all nations can be benefitted when there is free trade and specialization in terms of their absolute cost advantage.

The Theory

According to Adam Smith, the basis of international trade was absolute cost advantage. Trade between two countries would be mutually beneficial when one country produces a commodity at an absolute cost advantage over the other country which in turn produces another commodity at an absolute cost advantage over the first country.

Assumptions

1. There are two countries and two commodities (2 x 2 model).
2. Labour is the only factor of production.
3. Labour units are homogeneous.
4. The cost or price of a commodity is measured by the amount of labour required to produce it.
5. There is no transport cost.

Illustration

Absolute cost advantage theory can be illustrated with the help of the following example.

Absolute Cost Advantage

Country	India	China
Output per unit of labour		
Wheat	20	8
Cloths	6	14

From the illustration, it is clear that India has an absolute advantage in the production of wheat over China and China has an absolute advantage in the production of cloth over India. Therefore, India should specialize in the production of wheat and import cloth from China. China should specialize in the production of cloth and import wheat from India. This kind of trade would be mutually beneficial to both India and China.

Ricardo's Theory of Comparative Cost Advantage

David Ricardo, the British economist in his 'Principles of Political Economy and Taxation' published in 1817, formulated a systematic theory called 'Comparative Cost Theory'. Later it was refined by J.S Mill, Marshall, Taussig and others.

Ricardo demonstrates that the basis of trade is the comparative cost difference. In other words, trade can take place even if the absolute cost difference is absent but there is comparative cost difference.

According to Ricardo, a country can gain from trade when it produces at relatively lower costs. Even when a country enjoys absolute advantage in both goods, the country would specialize in the production and export of those goods which are relatively more advantageous. Similarly, even when a country has absolute disadvantage in production of both goods, the country would specialize in production and export of the commodity in which it is relatively less disadvantageous.

Assumptions

1. There are only two nations and two commodities (2x2 model)
2. Labour is the only element of cost of production.

3. All laborers are of equal efficiency.
4. Labour is perfectly mobile within the country but perfectly immobile between countries.
5. Production is subject to the law of constant returns.
6. Foreign trade is free from all barriers.
7. No change in technology.
8. No transport cost.
9. Perfect competition.
10. Full employment.
11. No government intervention.

Illustration

Ricardo's theory of comparative cost can be explained with a hypothetical example of production costs of cloth and wheat in America and India.

Comparative Cost Advantage (Units of labour required to produce one unit)

Country	Cloth	Wheat	Domestic Exchange Ratios
America	100	120	1 wheat = 1.2 cloth
India	90	80	1 wheat = 0.88 cloth

It is evident from the example that India has an absolute advantage in production of both cloth and wheat. However, India should concentrate on the production of wheat in which she enjoys a comparative cost advantage. ($80/120 < 90/100$). For America the comparative cost disadvantage is lesser in cloth production. Hence America will specialize in the production of cloth and export it to India in exchange for wheat. (Any exchange ratio between 0.88 units and 1.2 units of cloth against one unit of wheat represents gain for both the nations). With trade, India can get 1 unit of cloth and 1 unit of wheat by using its 160 labour units. In the absence of trade, for getting this benefit, India will have to use 170 units of labour. America also gains from this trade. With trade, America can get 1 unit of cloth and one unit of wheat by using its 200 units of labour. Otherwise, America will have to use 220 units of labour for getting 1 unit of cloth and 1 unit of wheat.

Criticisms

1. Labour cost is a small portion of the total cost. Hence, theory based on labour cost is unrealistic.
2. Laborers in different countries are not equal in efficiency.

Modern Theory of International Trade Introduction

The modern theory of international trade was developed by Swedish economist Eli Heckscher and his student Bertil Ohlin in 1919. This model was based on the Ricardian theory of international trade. This theory says that the basis for international trade is the difference in factor endowments. It is otherwise called as 'Factor Endowment Theory'.

Factor endowment model

- Developed by Heckscher and Ohlin
- Countries with a relative factor abundance can specialize and trade
- Abundance of skilled labour → specialization → export → exchange for goods and services produced by countries with abundance of unskilled labour
- Exports embody the abundant factor
- Imports embody the scarce factor
- Assumes a high degree of factor mobility

The Theory

The classical theory argued that the basis for foreign trade was comparative cost difference and it considered only labour factor. But the modern theory of international trade explains the causes for such comparative cost difference. This theory attributes international differences in comparative costs to:

- i. Difference in the endowments of factors of production between countries, and
- ii. Differences in the factor proportions required in production.

Assumptions

1. There are two countries, two commodities and two factors. (2x2x2 model)
2. Countries differ in factor endowments.
3. Commodities are categorized in terms of factor intensity.

4. Countries use same production technology.
5. Countries have identical demand conditions.
6. There is perfect competition in both product and factor markets in both the countries.

Heckscher - Ohlin (H-O) theorem

H-O theorem	Factor	Exports
“ A capital abundant country will export the capital - intensive good, while the labor - abundant country will export the labor - intensive good	Factor proportions model which links exports and imports to factor endowments.	A country exports those commodities produced with relatively large quantities of the country's relatively abundant factor.

Explanation

According to Heckscher - Ohlin, “a capital-abundant country will export the capital -intensive goods, while the labour-abundant country will export the labour-intensive goods”. A factor is regarded abundant or scarce in relation to the quantum of other factors. A country can be regarded as richly endowed with capital only if the ratio of capital to other factors is higher than other countries.

Illustration

Particulars	India	America
Supply of labour	50	24
Supply of capital	40	30
Capital - Labour Ratio	$40/50= 0.8$	$30/24=1.25$

In the above example, even though India has more capital in absolute terms, America is more richly endowed with capital because the ratio of capital in India is 0.8 which is less than that in America where it is 1.25. The following diagram illustrates the pattern of world trade.

Capital abundant country	$\begin{array}{c} \xrightarrow{\text{Export of capital-intensives goods}} \\ \xleftarrow{\text{Exports of labour-intensives goods}} \end{array}$	Labour abundant country
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Limitations

1. Factor endowment of a country may change over time.
2. The efficiency of the same factor (say labour) may differ in the two countries. For example, America may be labour scarce in terms of number of workers. But in terms of efficiency, the total labour may be larger.

Comparison of Classical Theory and Modern Theory

S.No	Classical Theory of International Trade	Modern Theory of International Trade
1.	The classical theory explains the phenomenon of international trade on the basis of labour theory of value.	The modern theory explains the phenomenon of international trade on the basis of general theory of value.
2.	It present a one factor (labour) model	It presents a multi - factor (labour and capital) model.
3.	It attributes the differences in the comparative costs to differences in the productive efficiency of workers in the two countries.	It attributes the differences in comparative costs to the differences in factor endowments in the two countries.

Gains from International Trade

International trade helps a country to export its surplus goods to other countries and secure a better market for it. Similarly, international trade helps a country to import the goods which cannot be produced at all or can be produced at a higher cost. The gains from international trade may be categorized under four heads.

I. Efficient Production

International trade enables each participatory country to specialize in the production of goods in which it has absolute or comparative advantages. International specialization offers the following gains.

1. Better utilization of resources.
2. Concentration in the production of goods in which it has a comparative advantage.
3. Saving in time.
4. Perfection of skills in production.
5. Improvement in the techniques of production.
6. Increased production.
7. Higher standard of living in the trading countries.

II. Equalization of Prices between Countries

International trade may help to equalize prices in all the trading countries.

1. Prices of goods are equalized between the countries (However, in reality it has not happened).
2. The difference is only with regard to the cost of transportation.
3. Prices of factors of production are also equalized (However, in reality it has not happened).

III. Equitable Distribution of Scarce Materials

International trade may help the trading countries to have equitable distribution of scarce resources.

IV. General Advantages of International Trade

1. Availability of variety of goods for consumption.
2. Generation of more employment opportunities.
3. Industrialization of backward nations.
4. Improvement in relationship among countries (However, in reality it has not happened).
5. Division of labour and specialization.
6. Expansion in transport facilities.

Terms of Trade

The gains from international trade depend upon the terms of trade which refers to the ratio of export prices to import prices.

Meaning

It is the rate at which the goods of one country are exchanged for goods of another country. It is expressed as the relation between export prices and import prices. Terms of trade improves when average price of exports is higher than average price of imports.

Types of Terms of Trade

The different concepts of terms of trade were classified by Gerald M. Meier into the following three categories:

Terms of Trade related to the Ratio of Exchange between Commodities

Terms of Trade		
Net Barter Terms of Trade - Taussig	Gross Barter Terms of Trade - Taussig	Income Terms of Trade - G.s. Dorrance

1. Net Barter Terms of Trade

This type was developed by Taussig in 1927. The ratio between the prices of exports and of imports is called the "net barter terms of trade". It is named by Viner as the 'commodity terms of trade'.

It is expressed as:

$$T_n = (P_x / P_m) \times 100$$

Where,

T_n = Net Barter Terms of Trade

P_x = Index number of export prices

P_m = Index number of import prices

This is used to measure the gain from international trade. If 'Tn' is greater than 100, then it is a favorable terms of trade which will mean that for a rupee of export, more of imports can be received by a country.

2. Gross Barter Terms of Trade

This was developed by Taussig in 1927 as an improvement over the net terms of trade. It is an index of relationship between total physical quantity of imports and the total physical quantity of exports.

$$T_q = (Q_m / Q_x) \times 100$$

If for a given quantity of export, more quantity of import can be consumed by a country, then one can say that terms of trade are favorable.

3. Income Terms of Trade

The income terms of trade was given by G.S.Dorrance in 1948. It is the index of the value of exports divided by the price index for imports multiplied by quantity index of exports. In other words, it is the net barter terms of trade of a country multiplied by its exports-volume index.

$$T_y = (P_x / P_m) Q_x$$

Where,

P_x = Price index of exports

P_m = Price index of imports

Q_x = Quantity index of exports

Terms of Trade related to the Interchange between Productive Resources

1. The Single Factoral Terms of Trade

Viner has devised another concept called "the single factoral terms of trade" as an improvement upon the commodity terms of trade. It represents the ratio of export-price index to the import-price index adjusted for changes in the productivity of a country's factors in the production of exports. Symbolically, it can be stated as

$$T_f = (P_x / P_m) F_x$$

Where, T_f stands for single factorial terms of trade index. F_x stands for productivity in exports (which is measured as the index of cost in terms of quantity of factors of production used per unit of export).

2. Double Factoral Terms of Trade

Viner constructed another index called “Double factorial terms of Trade”. It is expressed as

$$T_f = (P_x / P_m) (F_x / F_m)$$

Which takes into account the productivity in country’s exports, as well as the productivity of foreign factors? Here, F_m represents import index (which is measured as the index of cost in terms of quantity of factors of production employed per unit of imports).

Balance of Trade Vs Balance of Payments

Balance of Trade and Balance of Payments are two different concepts in the subject of international trade.

Balance of Trade (BOT)

Balance of Trade (BOT) refers to the total value of a country’s exports of commodities and total value of imports of commodities. Only export and import of commodities are included in the statement of Balance of Trade of a country. Movements of goods (export and imports of commodities) are also known as ‘visible trade’, because the movement of commodities between countries can be seen by eyes and felt by hands and can be verified physically by custom authorities of a country.

Favorable BOT

When the total value of commodity exports of a country exceeds the total value of commodity imports of that country, it is said that the country has a ‘favorable’ balance of trade.

Unfavorable BOT

If total value of commodity exports of a country is less than the total value of commodity imports of that country, that country is said to have an 'unfavorable' balance of trade.

Balance of Payments (BOP)

BoP is a systematic record of a country's economic and financial transactions with the rest of the world over a period of time.

When a payment is received from a foreign country, it is a credit transaction while a payment to a foreign country is a debit transaction. The principal items shown on the credit side are exports of goods and services, transfer receipts in the form of gift etc., from foreigners, borrowing from abroad, foreign direct investment and official sale of reserve assets including gold to foreign countries and international agencies.

The principal items on the debit side include imports of goods and services, transfer payments to foreigners, lending to foreign countries, investments by residents in foreign countries and official purchase of reserve assets or gold from foreign countries and international agencies.

Components of BOPs

The credit and debit items are shown vertically in the BOP account of a country. Horizontally, they are divided into three categories, i.e.

- a. The current account,
- b. The capital account and
- c. The official settlements account or official reserve assets account.

a. The Current Account: It includes all international trade transactions of goods and services, international service transactions (i.e. tourism, transportation and royalty fees) and international unilateral transfers (i.e. gifts and foreign aid).

b. The Capital Account: Financial transactions consisting of direct investment and purchases of interest-bearing financial instruments, non-interest bearing demand deposits and gold fall under the capital account.

c. The Official Reserve Assets Account: Official reserve transactions consist of movements of international reserves by governments and official agencies to accommodate imbalances arising from the current and capital accounts. The official reserve assets of a country include its gold stock, holdings of its convertible foreign currencies and Special Drawing Rights (SDRs) and its net position in the International Monetary Fund (IMF).

$$\text{Credit (Receipts - Debit (Payments)) = Balance [Deficit (-), Surplus (+)]}$$

$$\text{Deficit if Debit} > \text{Credit}$$

Balance of Payments Disequilibrium

The BoP is said to be balanced when the receipts (R) and payments (P) are just equal, i.e,

Favorable BoP

When receipts exceed payments, the BoP is said to be favorable. That is,

$$R / P > 1.$$

Types BOP Disequilibrium:

There are three main types of BOP Disequilibrium, which are discussed below.

- i. Cyclical Disequilibrium,
- ii. Secular Disequilibrium,
- iii. Structural Disequilibrium.

i. Cyclical Disequilibrium: Cyclical disequilibrium occurs because of two reasons. First, two countries may be passing through different phases of business cycle. Secondly, the elasticities of demand may differ between countries.

ii. Secular Disequilibrium: The secular or long-run disequilibrium in BOP occurs because of long-run and deep seated changes in an economy as it advances from one stage of growth to another. In the initial stages of development, domestic investment exceeds domestic savings and imports exceed exports, as it happens in India since 1951.

- iii. **Structural Disequilibrium:** Structural changes in the economy may also cause balance of payments disequilibrium. Such structural changes include development of alternative sources of supply, development of better substitutes, exhaustion of productive resources or changes in transport routes and costs.

Causes for BoP Disequilibrium

The following are the major causes producing disequilibrium in the balance of payments of a country.

1. **Cyclical Fluctuation:** Cyclical disequilibrium in different countries is caused by their cyclical fluctuations, their phases and magnitude. World trade shrinks during depression while trade flourishes during prosperity
2. **Structural Changes:** Structural disequilibrium is caused by the structural changes brought by huge development and investment programmes in the developing economies. Such economies may have high propensity to import for want of capital for rapid industrialization, while export may not be boosted up to that extent.
3. **Development Expenditure:** Development disequilibrium is caused by rapid economic development which results in income and price effects. The less developed countries in the early stage of development are not self sufficient. Income, savings and investment are abysmally low. They depend upon developed countries for import of commodities, capital and technology. Export potential is low and import intensity is high. So the LDCs suffer from adverse BoP
4. **Consumerism:** Balance of payments position of a country is adversely affected by a huge increase in consumption. This increases the need for imports and decreases the capacity to export.
5. **Demonstration Effect:** Deficit in the balance of payments of developing countries is also caused by demonstration effect which influences the people in UDCs to imitate western styled goods. This will raise the propensity to import causing adverse balance of payments. This is good for the developed countries.

6. **Borrowing:** International borrowing and investment may cause a deficit in the balance of payments. When the international borrowing is heavy, a country's balance of payments will be adverse since it repays loans with interest. Servicing of debt is a huge burden. That is why the UDCs are forced to borrow more.
7. **Technological Backwardness:** Due to technological backwardness, the people (Indians) are unable to use the energy (Solar) available with them. As a result they import huge petroleum products from foreign countries, increasing the trade deficit.
8. **Global Politics:** The rich countries (Eg. USA) need to sell their weapons to promote their economy and generate employment. Hence, wars between countries (for example Iran and Iraq, Pakistan and India) are stimulated. In order to win the wars, the poor countries are forced to buy the weapons from weapon - rich countries, using their export earnings and creating trade deficit. Thus UDCs are trapped forever.

Measures to Correct BOP Disequilibrium

There are a number of measures available for correcting the balance of payments disequilibrium. They are divided into two broad groups, namely, (i) automatic correction and (ii) deliberate measures.

I. Automatic Correction

If the market forces of demand and supply are allowed to play freely, equilibrium will be automatically restored in course of time. Under the free exchange rate system, the automatic adjustments of the balance of payments can take place through changes in the variables like price, interest, income and capital flows.

1. Price Adjustments

As a result of foreign exchange outflow from a deficit country to a surplus country, there will be a fall in the money supply in the deficit country and increase in the money supply in the surplus country. This will result in rise in the price in the surplus country which will encourage imports and discourage exports. Fall in prices in the deficit country will encourage exports and discourage imports, leading to restoration of BoP equilibrium.

2. Interest Rate Adjustments

The contraction or expansion of money supply resulting from the BoP deficit or surplus leads to a rise or fall in the interest rates. A rise in interest rate in the withdraw their funds from abroad and invest in their home country. The opposite happens in the surplus country.

3. Income Adjustments

A nation with payments surplus will experience rising income which will increase imports and thereafter equilibrium is restored in Balance of Payments.

4. Capital Flows

Changes in the interest rate consequent to the BoP disequilibrium will encourage capital flows from the surplus nations to deficit nations helping restoration of the BoP equilibrium.

II. Deliberate Measures

The deliberate measures may be broadly grouped into (a) monetary measures (b) trade measures and (c) miscellaneous measures.

a. Monetary Measures

1. Monetary Contraction

High domestic price level is responsible for high imports and low exports. In order to control inflation, the central monetary authority controls credit. As a result, the prices come down and exports increase. This will help to correct adverse BoP. However, if credit is controlled, investment will decline, production will go down, prices will increase. This is the cause of confusion between government and RBI in India in 2010s.

2. Devaluation

Devaluation means deliberate reduction of the official rate at which domestic currency is exchanged for another currency. In other words,

devaluation refers to a reduction in the external value of a currency in the terms of other currencies. For instance, instead of 70 ₹ per US\$, making ₹ 80 per US\$. A country with fundamental disequilibrium in the balance of payments may devalue its currency in order to stimulate its exports and discourage imports to correct the disequilibrium. Devaluation makes exports cheaper and imports dearer. That means making Indian good cheaper for foreigners and foreign goods costlier for Indians.

3. Exchange Control

Exchange control means the state intervention in the forex market. It is a popular method employed to influence the balance of payments position of a country. Under exchange control, the government or central bank assumes complete control over the foreign exchange reserves and earning of the country. The recipients of foreign exchange, like exporters, are required to surrender foreign exchange to the government / central bank in exchange for domestic currency. By virtue of its control over the use of foreign exchange, the government can control imports. Does it happen in India? Too much of imports control would invite more and more smuggled goods. Smuggling of gold into Indian airports regularly happens, as per the reports in the media.

III. Trade Measures

Trade measures include measures to promote exports and to reduce imports.

1. Export Promotion

Exports may be encouraged by i).reducing or abolishing export duties, ii). providing export subsidy, iii).encouraging export production by giving monetary, fiscal, physical and institutional incentives. (Then local people and domestic industries would suffer)

2. Import Control

Imports may be controlled by i).imposing or enhancing import duties, ii).restricting imports through import quotas, iii).licensing and even prohibiting altogether the import of certain non- essential items. But this would encourage smuggling.

IV. Miscellaneous Measures

In addition to the measures mentioned above, there are a number of other measures that can help make the balance of payments position more favorable, like foreign loans, encouraging foreign investment in the home country, development of tourism to attract foreign tourists, providing incentives to enhance inward remittances and import substitution.

Exchange Rate

Meaning of Foreign Exchange (FOREX)

FOREX refers to foreign currencies. The mechanism through which payments are effected between two countries having different currency systems is called FOREX system. It covers methods of payment, rules and regulations of payment and the institutions facilitating such payments.

Definition of FOREX

“FOREX is the system or process of converting one national currency into another, and of transferring money from one country to another”.

Rate of Exchange

The transactions in the exchange market are carried out at exchange rates. It is the external value of domestic currency. Thus, exchange rate may be defined as the price paid in the home currency (say ₹ 75) for a unit of foreign currency (say 1 US \$). It can be quoted in two ways:

1. One unit of foreign money (1 USD) to so many units of the domestic currency (₹); or
2. A certain number of units of foreign currency (USD) to one unit of domestic money (₹ 1)

For instance:

1 U.S Dollar = ₹ 70 , or ₹ 1 = U.S.1.42 cents

Definition of Equilibrium Exchange Rate

“The equilibrium exchange rate is that rate, which over a certain period of time, keeps the balance of payments in equilibrium”.

- Ragner Nurkse

Determination of Equilibrium Exchange Rate

The equilibrium rate of exchange is determined in the foreign exchange market in accordance with the general theory of value, i.e., by the interaction of the forces of demand and supply. Thus, the rate of exchange is determined at the point where demand for forex is equal to the supply of forex.

In the above diagram, Y axis represents exchange rate, that is, value of rupee in terms of dollars. X axis represents demand and supply of forex. E is the point of equilibrium where DD intersects SS. The exchange rate is P2.

Types of Exchange Rate Systems

Broadly, there are two major exchange rate systems, namely, (1) fixed (or pegged) exchange rate system and (2) flexible (or floating) exchange rate system. Managed Floating Exchange Rate system also prevails in some countries (like India).

1. Fixed Exchange Rates

Countries following the fixed exchange rate (also known as stable exchange rate and pegged exchange rate) system agree to keep their currencies at a fixed rate as determined by the Government. Under the gold standard, the value of currencies was fixed in terms of gold.

2. Flexible Exchange Rates

Under the flexible exchange rate (also known as floating exchange rate) system, exchange rates are freely determined in an open market by market forces of demand and supply.

Types of Exchange Rates

Exchange rates are also in the form of (a) Nominal exchange rate (b) Real exchange rate (c) Nominal Effective Exchange Rate (NEER) and (d) Real Effective Exchange Rate (REER)

If 1 US Dollar = ₹ 75, Nominal exchange rate = $75/1 = 75$.
This is the bilateral nominal exchange rate.

$$\text{Real Exchange rate} = \frac{eP_f}{P}$$

P = Price levels in India

P_f = Price levels in abroad (say US)

e = nominal exchange rate.

If a pen costs ₹ 50 in India and it costs 5 USD in the US,

$$\text{Real Exchange Rate} = \frac{75 \times 5}{50} = 7.5$$

If real exchange rate is equal to 1, the currencies are at purchasing power parity.

If the price of the pen in US is 0.66 USD, then the real exchange rate $\frac{0.66 \times 75}{50}$ then it could be said that the USD and Indian rupee are at purchasing power parity.

NEER and REER are not explained here.

Interested students and teachers can search for them.

Determinants of Exchange Rates

Exchange rates are determined by numerous factors and they are related to the trading relationship between two countries.

1. Differentials in Inflation

Inflation and exchange rates are inversely related. A country with a consistently lower inflation rate exhibits a rising currency value, as its purchasing power increases relative to other currencies.

2. Differentials in Interest Rates

There is a high degree of correlation between interest rates, inflation and exchange rates. Central banks can influence over both inflation and exchange rates by manipulating interest rates. Higher interest rates attract foreign capital and cause the exchange rate to rise and vice versa.

3. Current Account Deficits

A deficit in the current account implies excess of payments over receipts. The country resorts to borrowing capital from foreign sources to make up the deficit. Excess demand for foreign currency lowers a country's exchange rate.

Public Debt

Large public debts are driving out foreign investors, because it leads to inflation. As a result, exchange rate will be lower.

Terms of Trade

A country's terms of trade also determines the exchange rate. If the price of a country's exports rises by a greater rate than that of its imports, its terms of trade will improve. Favorable terms of trade imply greater demand for the country's exports and thus BoP becomes favorable.

Political and Economic Stability

If a nation's political climate is stable and economic performance is good, its currency value will be appreciated by attracting more foreign capital.

Recession

Interest rates are low during the recession phase. This will decrease inflow of foreign capital. As a result, a currency will be depreciated against other currencies, thereby lowering the exchange rate.

Speculation

If a country's currency value is expected to rise, investors will demand more of that currency in order to make a profit in the near future. This results in appreciation of the exchange rate. Beside the above determinants, relative dominance in the global politics and the power to announce economic sanctions over other countries also determine exchange rates.

Foreign Direct Investment (FDI) and Trade

FDI is an important factor in global economy. Foreign trade and FDI are closely related. In developing countries like India, FDI in the natural resource sector, including plantations, increases trade volume. Foreign production by FDI is useful to substitute foreign trade. FDI is also influenced by the income generated from the trade and regional integration schemes.

FDI is helpful to accelerate the economic growth by facilitating essential imports needed for carrying out development programmes like capital goods, technical know-how, raw materials and other inputs and even scarce consumer goods.

When the export earnings of a country are not sufficient to finance for imports, FDI may be required to fill the trade gap.

FDI is encouraged by the factors such as foreign exchange shortage, desire to create employment and acceleration of the pace of economic development. Many developing countries strongly prefer foreign investment to imports. However, the real impact of FDI on different sections of an economy (say India) may differ. It could be a boon for some as well as bane for others. This may be discussed in the class - room. Large demand for USD, generated by IMF and World Bank policies (FUND - BANK POLICIES), help the USD to gain value continuously. This is one of the hidden agenda of Fund - Bank policies.

Meaning of FDI

FDI means an investment in a foreign country that involves some degree of control and participation in management. It corresponds to the investment made by a multinational enterprise in a foreign country. It is different from

portfolio investment, which is primarily motivated by short term profit and it does not seek management control.

Foreign Portfolio Investment (FPI) means the entry of funds into a nation where foreigners deposit money in a nation's bank or make purchase in the stock and bond markets, sometimes for speculation. FPI is part of capital account of BoP.

Objectives of FDI

FDI has the following objectives.

1. Sales Expansion
2. Acquisition of resources
3. Diversification
4. Minimization of competitive risk.

Foreign Institutional Investment (FII) is an investment in hedge funds, insurance companies, pension funds and mutual funds. Foreign institutional investment is a common term in the financial sector of India. For example, a mutual fund in the United States can make investment in an India-based company.

Advantages of FDI

Foreign investment mostly takes the form of direct investment. Hence, we deal here with the foreign direct investment.

The important advantages of foreign direct investment are the following:

1. FDI may help to increase the investment level and thereby the income and employment in the host country.
2. Direct foreign investment may facilitate transfer of technology to the recipient country.
3. FDI may also bring revenue to the government of host country when it taxes profits of foreign firms or gets royalties from concession agreements.
4. A part of profit from direct foreign investment may be ploughed back into the expansion, modernization or development of related industries.
5. It may kindle a managerial revolution in the recipient country through professional management and sophisticated management techniques.

6. Foreign capital may enable the country to increase its exports and reduce import requirements. And thereby ease BoP disequilibrium.
7. Foreign investment may also help increase competition and break domestic monopolies.
8. If FDI adds more value to output in the recipient country than the return on capital from foreign investment, then the social returns are greater than the private returns on foreign investment.
9. By bringing capital and foreign exchange FDI may help in filling the savings gap and the foreign exchange gap in order to achieve the goal of national economic development.
10. Foreign investments may stimulate domestic enterprise to invest in ancillary industries in collaboration with foreign enterprises.
11. Lastly, FDI flowing into a developing country may also encourage its entrepreneurs to invest in the other LDCs. Firms in India have started investing in Nepal, Uganda, Ethiopia and Kenya and other LDCs while they are still borrowing from abroad. Larger FDI to India comes from a small country (Mauritius).

Disadvantages of FDI

The following criticisms are leveled against foreign direct investment.

1. Private foreign capital tends to flow to the high profit areas rather than to the priority sectors.
2. The technologies brought in by the foreign investor may not be appropriate to the consumption needs, size of the domestic market, resource availabilities, stage of development of the economy, etc.
3. Foreign investment, sometimes, have unfavorable effect on the Balance of Payments of a country because when the drain of foreign exchange by way of royalty, dividend, etc. is more than the investment made by the foreign concerns.
4. Foreign capital sometimes interferes in the national politics.
5. Foreign investors sometimes engage in unfair and unethical trade practices.
6. Foreign investment in some cases leads to the destruction or weakening of small and medium enterprises.
7. Sometimes foreign investment can result in the dangerous situation of minimizing / eliminating competition and the creation of monopolies or oligopolistic structures.

8. Often, there are several costs associated with encouraging foreign investment.

FDI in India

The early 1990s witnessed reforms in the economic policy. This helped to open up Indian markets to FDI. FDI in India has increased over the years. In India, FDI has been advantageous in terms of free flow of capital, improved technology, management expertise and access to international markets.

The major sectors benefited from FDI in India are:

- i. financial sector (banking and non-banking)
- ii. insurance
- iii. telecommunication
- iv. hospitality and tourism
- v. pharmaceuticals and
- vi. software and information technology.

FDI is not permitted in the industrial sectors like

- i. Arms and ammunition
- ii. atomic energy,
- iii. railways,
- iv. coal and lignite and
- v. mining of iron, manganese, chrome, gypsum, sulphur, gold, diamonds, copper etc.,

FDI inflow in India has increased from \$97 million in 1990-91 to \$5,535 million in 2004-2005. It amounted to \$32,955 million in 2011-2012. UNCTAD's World Investment Report 2018 reveals that FDI to India declined to \$40 billion in 2017 from \$44 billion in 2016.