KLE LAW ACADEMY BELAGAVI

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STUDY MATERIAL

for

MONEY, BANKING, AND INTERNATIONAL TRADE

Prepared as per the syllabus prescribed by Karnataka State Law University (KSLU), Hubballi

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KLE Society's Law College, Bengaluru

Minor II- Economics 2

Money, Banking and International Trade

Syllabus

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1. Meaning and definition of Money and its functions.
2. Supply of Money – M1, M2, M3, M4.
3. Value of Money-Meaning.
4. Index Numbers: Simple and Weighted Index Numbers, Construction of Index Numbers, Problems and uses.

Quantity Theory of Money:

1. Cash Transaction Approach.
2. Cash Balance Approach.
3. Inflation and Deflation- Types, Causes and effects.

UNIT-II: Money Market

1. Money Market- meaning, features and components.
2. Functions of a Commercial Bank.
3. Balance sheet of a Commercial Bank.
4. Liquidity Vs Profitability.
5. Credit Creation.

UNIT-III: Central Banking

1. Functions of Central Bank.
2. Methods of Credit control.
    a. Quantitative methods
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3. Objectives of Monetary Policy.

UNIT-IV: International Trade

1. Importance of International trade.
2. Theories of International Trade-
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4. Trade Barriers-Tariffs and Quotas.

UNIT-V: Balance of Payments and Foreign Exchange

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2. Disequilibrium in BOP- Causes and Methods of Correction.
3. Determination of Foreign exchange rate. Demand for and Supply of Foreign Exchange, Market Objectives and Methods of Exchange Control, Fixed and Flexible Exchange Rate system.
4. Brief History of GATT, Achievements of GATT WTO- objectives, functions and agreements, TRIPS and TRIMS, WTO & India
5. Foreign direct Investment: Concepts FDI, Nature and its role, operations of MNCs.

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UNIT I

Meaning and definition of Money and its functions

Meaning and definition of Money

a. Meaning of Money
b. Definitions of Money
c. Approaches to Money
d. Money and near money

a. Meaning of Money

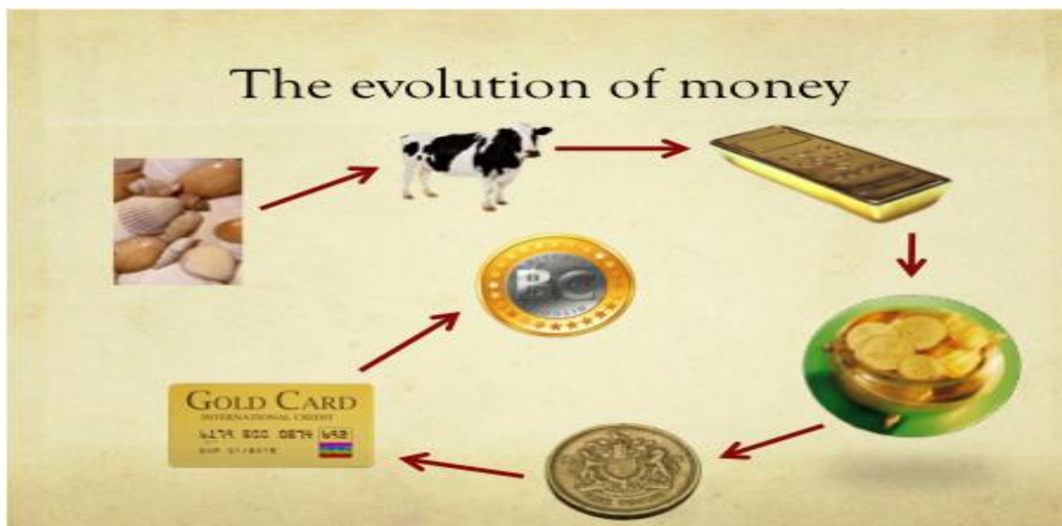
Money is any good that is widely used and accepted in transactions involving the transfer of goods and services from one person to another. Money is considered to be the greatest invention of man. Money helps in understanding and analyzing the purchasing power of man. Money is a liquid asset used in the settlement of transactions. It functions based on the general acceptance of its value within a governmental economy and internationally through foreign exchange.

Money is indispensable part of today's economic world. The evolution of money has passed through various stages. The evolution of money occurred mainly due to the difficulties that emerged in barter system. The exchange occurred through barter system, where goods and services were exchanged for goods and services. This process of exchange was without any general acceptable medium of exchange for purchase of goods and services, thus lead to many difficulties like lack of double coincidence of wants, non existence of common standard of unit and subdivision of goods. To resolve these difficulties, man invented money.

The first form of money was commodity money, and commodities such as bows, sea shells, beads, arrows, fur and skin served as a means of exchange. Over a period of time, with the progression of human civilization, commodity money was replaced by metallic money, where precious metals like gold and silver acted a medium of exchange. Further, there was an argument for scarcity concept than value, and precious metals were replaced by paper money.

Initially paper notes were simple claims that acted as a substitute for metallic money. Over a period of time paper money gained its recognition and took the form of currency notes that were issued by banks. The money has taken the form of deposit money, electronic money. Money is today in the form of plastic money with the emergence Credit cards and Debit cards.

The latest revolution to facilitate trade and commerce is Bitcoin. Bitcoin is a digital currency created in January 2009; Bitcoin is an innovative payment network and a new kind of money.



b. Definitions of Money

The term money is derived from Latin word 'moneta' and is the surname of Greek goddess Jumo. The term money has been defined differently by various economists. The most accepted definitions of money are as follows-

Walker defines – ''money is what money does.

The most popular definition, explains in simple words, the power of money to perform all functions.

Seligman- defines money as ''one thing that possess general acceptability.

He opines that anything which is accepted by all is money. This definition does not possess clarity in explaining the term money.

Robertson defines money as 'anything which is widely accepted in payment for goods or in discharge of other business obligations'.

Robertson's definition was not much appreciated as it considers only the metallic money as medium of exchange; it narrows down the meaning of money.

Crowther defines 'anything that is generally acceptable as a means of exchange and that at the same time acts as a measure and store of value'.

It is considered as one of the best definition of money which defines the major functions of money that money performs, they are-

a. Medium of exchange,,

b. Standard of value

c. Store of value.

Money is defined both in narrow sense and broad sense by economists. The defining of money becomes narrow when it is restricted to coins, paper currency and demand deposits of commercial banks. Money is interpreted in broader scope when it substitutes liquid money and posses the features of money.

c. Approaches to money

The definition of money has had its own approaches. They are based on constituents of money, they are as follows-

1. Traditional approach
2. Monetarist approach
3. Liquidity approach
4. Central bank approach.

1. *Traditional approach-*

The traditional approach emphasizes the medium of exchange function of money. It pays for all the goods and services transacted in the community. Consequently anything is money which functions generally as a medium of exchange in the economy. This definition of money includes only the currency and the demand deposits in commercial banks as constituting the supply of money i.e. M=C+D. Thus money here is inclusive of Money (M), which constitutes Currency (C) and Demand Deposits (DD).

6. *Monetarist approach*

The Chicago Approach to the concept of money is associated with Prof. Milton Friedman and other monetary theorists of the University of Chicago. It is a broader definition of money by including in it besides the currency and chequable or demand deposits, the commercial bank time deposits -fixed interest bearing deposits placed with the commercial banks.Here money is defined as a temporary abode of purchasing power. Money includes-

C - Currency

DD – Demand deposits

TD – Time deposits.

Time deposits in this approach are considered as close substitutes for currency and deposits.

7. *Liquidity approach*

Liquidity approach defines money as the sum of currency and then its substitutes. According to John Gurley and Edward Shaw approach, currency and demand deposits are just two among the many claims against financial intermediaries. They stress on the close substitution relationship between currency, demand deposits, and commercial bank time deposits, saving bank deposits, credit institutions' shares and bonds etc. all of which are regarded as alternative liquid stores of value by the public. It includes –

C - Currency

DD – Demand deposits

TD – Time deposits

SB – Savings bank deposits

S – Shares

B – Bonds

The Gurley and Shaw approach includes in the list of close substitutes for the means of payment the deposits of and the claims against all types of financial intermediaries.

8. ***Central Bank Approach***

It is the broadest possible view of money. It also includes total amount of credit extended by a wide variety of sources.

C - Currency

DD – Demand deposits

TD – Time deposits

NBFI – Credit from on Bank Financial Institutions.

CUA – Credit from Un Organized Agencies.

Some argue even liquid assets or near money and should be included in money. Money is identified with the credit extended by a wide variety of sources. The reason for identifying money with credit used in the broadest possible sense of the term lies in the Central Bank's historic position that total credit availability constitutes the key variable for regulating the economy.

Thus money means –

1. To identify the things that serve as money.
2. To measure the total stock of money at a particular time.

Money in practical applicability can be a statistical analysis where it can showcase money as a thing, commodity or an asset.

d. Money and near money

Money is the most liquid form of money used for the purchase of commodities and services. It consists of coins, currency notes. It is a necessity for meeting the day to day small transactions. They are called as perfect liquid assets.

The large transactions are normally made through bank money. Certain assets which are highly liquid but not perfectly liquid as cash are called as near money. Near money does perform certain functions as money does, but they are only claims to money

They are claims only over others and are negotiable instruments. It cannot be used for direct purchase of goods and services, thus they are not as liquid as cash, but are close substitutes. They are also called as money substitutes or near money or liquid assets. Nearness of money will depend on the degree of liquidity of near money assets. These are near money assets and are not money, but are only claims to money. Present economic system not only depends on legal tender money, but more on supply of near money.

Functions of Money

Introduction

Money has to perform many functions especially in modern economic systems. It is customary to classify these functions under the following heads –

1. Primary functions – these are basic or fundamental functions
2. Secondary functions – they are derived from primary functions.
3. Contingent functions – they are additional functions performed in modern economies.

1. **Primary Functions**- they are also called as main functions of money. They are the original and most significant functions of money.

a. Money is a medium of exchange –

It is the basic function of money. As money has a general acceptability, all exchange of goods and services takes place in terms of money and thus it facilitates buying and selling of goods and services. Modern exchange system acts as an intermediary between the sales and purchases. Based on this function, money is referred as medium of exchange. It not only gives power to purchase but also options to purchase.

b. Money as measure of value-

It is called as measure of value as all the value of goods and services are expressed in terms of money. This helps in easier determination of exchange price for various types of goods and services. Money acts as a measuring yard stick. And as a standard of value, money serves a as a common denominator and all transactions are referred to as a common unit. The second function of money as a measure of value flows naturally from the first function.

2. Secondary functions- These functions emerge from primary functions.

a. Store of value –

Money being the most liquid asset is a convenient form to store wealth. As it possesses highest liquidity, it can be stored as a liquid asset and facilitates utility of money at the time of need and necessity. As a store of value, it has helped in the process of capital formation.

b. Standard of deferred payments –

A deferred payment refers to the payments to be made in the future date. This function has facilitated the process of borrowing and lending. Money has successfully proved as a standard of deferred payment mainly because money posse's stable value, it is durable and possesses the quality of general acceptability.

c. Transfer of value-

This function of money emerged with economic growth and development. As the markets extended and led to growth of external trade, money performed the function of transfer of value. As money possessed the quality of general acceptability, certain currencies emerged as common medium of exchange. With this function of money, borrowing and lending concept emerged. This function of money helps us to analyses the socio economic importance of the society.

3. Contingent functions

A contingent function of money was described by Prof Kinley. The functions are as follows-

a. Money as basis of credit-

The importance for credit was seen in developed countries and credit instruments are extensively used in these countries. Short term money market is popular through use of cheques, bills of exchange and various other short term credit instruments.

b. Money facilitates distribution of social income-

Money has facilitated distribution of income for various factors of production. It has been helpful in determining the share of each factor, and total output produced in terms of money.

c. Money helps in equalizing marginal utilities and marginal productivities-

Money is playing an important role in equalizing marginal utilities as all goods and services are expressed in terms of money. The consumer can express his level of satisfaction derived out of his expenditure incurred on various commodities in such a way that he could derive equal satisfaction for all the expenditure made on various goods.

d. ***Money enhances productivity of capital-***

Financial capital has multipurpose utility and can be transferred from less productive utility to more productive uses. Money facilitates mobility and thus enhances the productivity of capital through optimum utilization.

4. Other functions

Money also performs other functions like-

a. Money maintains repayment capacity as it has the quality of general acceptability. By maintaining liquid money the firms and individuals will maintain their repayment capacity.
b. Money represents general purchasing power because money is generally utilized for meeting the consumption requirements to meet the various demands.
c. Money gives liquidity to capital as it has multi utility. J.M. Keynes has explained the motives to keep capital in liquid form.

   They are transaction motives to meet the day to day requirements. Precautionary motives to keep some cash to meet the unforeseen contingencies, and speculative motives to invest in long term.

The evolution of money has eased the process of meeting the consumption process as money has facilitated the basic function as medium of exchange and unit of account. With the time, there has been a change in the various tasks money is performing to meet the requisites of the changing economic functioning of the economic system. Today we stand in the phase where it is difficult to imagine the functioning of economic system; money has become inevitable part of the economic system.

Significance of Money

Money plays a vital role in the operation of the national and international economy, and thus occupies a central position in modern economy. Money is everywhere and for everything in the modern economic life. Money has become the religion of the day in the ordinary business of life.

As Marshall rightly points out “Money is the pivot around which economic science clusters.” And, “the major part of the subject matter of economics is concerned with the functioning and malfunctioning of money.”

Every branch of economic activity in a money economy is basically different from what it would have been in a barter economy. Money has created a far reaching effect on all facets of economic activities: consumption, production, exchange and distribution, as also on public finance and economic welfare.

As Robertson states, “The existence of a monetary economy helps society to discover what people want and how much they want it and then to decide what shall be produced and in what quantities, and how to make the best use of its limited productive power.

Economic significance of Money is as follows-

1. Money helps consumer in the process of consumption.

   Money enables a consumer to generalise his purchasing power and gives him command over for choice of a wide variety of goods. It enables him to know his purchasing power. The consumer’s sovereignty is expressed through money spending. Thus money provides freedom of choice of consumption. Money and the price mechanism helps a consumer to allocate his income over goods in such a way that he derives maximum satisfaction from their consumption.

2. Money is helpful to producer for planning.
   Money is of equally important to the producer, as producer needs money to purchase raw materials, advertise his goods and for all other requisites to complete his process of production. Money helps him to plan and calculate his investment costs to continue

his investments and maximize his profits. Money helps in the general flow of goods and services from agricultural, industrial and tertiary sectors of the economy because all these activities are performed in terms of money.

3. Money brought in specialisation and division of labour.

   Money plays an important role in large scale specialisation and division of labour in modern production. Money helps to determine the wages to a large number of workers engaged in specialised jobs on the basis of division of labour. Each worker is paid money wages in accordance with the specialsation and nature of work done by him. Thus money facilitates specialisation and division of labour in modern production.

4. Money has successfully eliminated the problems of barter system.

   Money helps to address the drawbacks and the difficulties of a barter system of exchange. With the introduction of money as a medium of exchange, today double coincidence of wants between two individuals is eliminated. It is easy to measure the value of a commodity through money and thus exchange of goods is easier. Money determines the purchasing power. Money facilitates trade by serving as a medium of exchange. Thus, rapid exchange in a modern economic system is possible because of money. Money is the basis of the pricing mechanism through which economic activities are adjusted.

5. Money transforms savings into investment.

   By transforming savings into investment, money acts as a means to capital formation. Money is a liquid asset which can be stored and storing of money implies savings, and savings are kept in bank deposits to earn interest on them. Banks, in turn, lend these savings to investors in capital equipment, buying of raw materials, labour, etc. from different sources and places. This makes capital mobile and leads to capital formation and economic growth.

6. Money is helpful in proper allocation of resources to different lines of production.

   The proper allocation of economic resources to different lines of production is based on price mechanism which is expressed in terms of money. In countries having planning process, allocation of resources here also is guided by price mechanism.

7. Money facilitates trade

   Money facilitates trade by serving as medium of exchange. Money facilitates both national and international trade. The use of money as a medium of exchange, as a store of value and as a transfer of value has made it possible to sell goods and services

not only within the country but also internationally. To facilitate trade, money has helped in establishing money markets and capital markets. Banks, financial institutions, stock exchanges, produce exchanges, international financial institutions, which operate on the basis of the money economy, are helpful in both national and international trade.

8. Money brought mobility for capital.

   Money has made financial capital more liquid and has increased the mobility of money contributing to economic development of a country.

9. Money has established a link between present and future savings

   Savings in the form of storing money has helped for future utility, thus establishing the link between present and future. Money has also facilitated future transaction as value of money does not change much in course of time.

10. Money helps in proper Distribution of rewards to factors of production.

    Money eases the process of distribution of factors' rewards like wages, interests and profits which are all measured and disbursed in terms of money. It is with the help of money that the shares of different factors of production are properly adjusted.

11. Money and its significance with Public Finance.

    Government plays a very important role in modern economy. Government receives income in the form of taxes, fees, prices of public utility services, etc. and uses this income for administrative and developmental purposes. Fiscal devices like public borrowing and deficit financing for economic development can be adopted only in a monetary economy. In recent times, the fiscal policy of a government has acquired very great importance in economic life, since economic activities can be regulated through budgetary operations that are facilitated by the institution of money.

Money thus occupies an important role in shaping the economy of a country. The money enables the economic system and society to raise its standard of living by increasing production and equitable distribution through the medium of exchange

Evils of Money

The Bible says, "The love of money is the root of all evil." Rightly so Perhaps acting on this saying of the Bible, the classical economists did not attach much importance to money. They regarded it as a veil or garment or wrapper for goods and services. According to them, money is simply a tool of convenience to facilitate the exchange of goods and services, but it is not a determinant of the quantities produced. Today, economists regard money not merely as veil but also as an extremely valuable social instrument promoting wealth and welfare.

But money which is a useful servant, often misbehaves when it tries to act like a master. This leads to a number of economic and non economic defects of money.

The economic evils of money are-

1. Money leads to cyclical fluctuations

The institution of money leads to cyclical fluctuations in the economy. When the supply of money increases it leads to a boom and when it contracts there is a slump. In a boom, output, employment and income increase which lead to overproduction. On the contrary, they decline during a depression, thereby leading to under consumption. Such cyclical fluctuations bring untold miseries to the people. The fluctuation in money supply thus disturbs the smooth functioning of the economy.

2. Money strengthens capitalism

The empowerment of money has been strengthening capitalism. With strong emergence of capitalism, there is rise in the gap between distributions of income in the economy. Such changes in the structure of the society, widens the differences between the rich and the poor and leads to class conflict.

3. Instability in the Value of Money

The value of money does not remain stable over a period of time. When the value of money falls, it means rise in the price level or inflation. On the contrary, rise in the value of money means fall in the price levels or deflation. These changes are brought

about by increase or decrease in the supply for money. Large changes in the value of money are disastrous and even moderate changes have certain disadvantages. Thus instability in the value of money adversely affects consumers, producers and other sections of the society.

4. Wastage of Resources

   Money is the basis of credit. When banks create too much of credit, it may be used for productive and unproductive purposes. If much credit is used for production, it leads to over capitalisation and overproduction, and consequently to wastage of resources. Similarly, if liberal credit facilities are given for unproductive uses, they also lead to wastage of resources.

5. Black Money

   Money being the store of value lures people to hoard it. The tendency to hoard money and become rich is the root cause of the evil of black money. When people evade taxes and conceal their income and hoard it, it is black money. This leads to a "parallel" economy within the country which encourages conspicuous consumption, black marketing and speculation.

6. Money instead of being a servant tends to become the Master.

   Money if kept under control, it is beneficial, and then it functions as a servant. When money goes out of control, it is harmful for the entire economy.

Non-economic defects:

Money has the following non-economic defects:

The institution of money has brought down the moral, social and political structure of the society. It leads to corruption, turpitude, political bankruptcy and artificiality in religion based on materialism. "Significantly enough avarice is called the love of money; all evil is attributed to it." They are-

1. Money has gradually declined spiritualism in the society.
2. It has encouraged greed.
3. It is the ccontributor for fraud, theft and various types of crime in the society.

4. Money creates urge and desire in people and urges them to exploit others to fulfil their greed.

The entire defects are not direct cause of to money but are the result of the attribute of man towards the use of money. It is impossible to imagine this world without money where the econmy is socialist or capitalist. Money is an indispensable lubricant, a tool of convenience, for a continuous and smooth functioning of the economic machine.

Supply of Money

Supply of money refers to the amount of domestic currency that circulates in a national economy during a specified period. Money supply includes cash, coins, and money held in savings and checking accounts for short-term payments and investments. Money supply reflects the extent of liquidity that different money instruments have on an economy. Thus, Money supply means the total amount of money in an economy. The effective money supply consists mostly of currency and demand deposits.

The money supply is a key variable that helps us to understand the macro economy and guiding macroeconomic policy. Supply of money refers to its stock at any point of time; it is because money is a stock variable as against a flow variable. The stock of money always refers to the stock of money held by the public.

The Chicago School led by Milton Friedman opts to include all bank deposits, time and demand, in money supply. Schwartz and Friedman are willing to consider as money all marketable government securities which are supported at par. The argument is in the process of measuring money, is to include other deposits liabilities of the commercial banks, e.g., time deposits in USA and deposit accounts in the UK. The measures of money supply keep on changing from country to country and from time to time within the country. As such, the measurement of money supply becomes an empirical matter.

Up to 1968, the RBI published a single measure of money supply called M and later on M_1 defined as currency and demand deposits (DD), held by the public. It was called the narrow measure of money supply. After 1968 the RBI started publishing a 'broader' measure of money supply called aggregate monetary resources (AMR) defined as M or M_1 plus the net time deposits of banks held by the public (M_3). Since 1977 RBI is publishing data on four alternative measures of money supply denoted by M_1, M_2, M_3 and M_4.

The main reason why money supply is classified into various measures on the basis of its functions is that effective predictions can be made about the likely affects on the economy of changes in the different components of money supply. The monetary base is defined as the sum of currency in circulation and reserve balances (deposits held by banks and other depository institutions in their accounts at the Federal Reserve).

M1 is defined as the sum of currency held by the public and transaction deposits at depository institutions (which are financial institutions that obtain their funds mainly through deposits from the public, such as commercial banks, savings and loan associations, savings banks, and credit unions).

M2 is defined as M1 plus savings deposits, small-denomination time deposits (those issued in amounts of less than $100,000), and retail money market mutual fund shares. India and many developed countries have identified four concepts of money supply.

Money Supply M1 or Narrow Money:

This is the narrow measure of money supply and is composed of the following items:

$M_1 = C + DD + OD$

Where

C = Currency with the public

DD = Demand deposits with the public in the Commercial and Cooperative Banks.

OD = other deposits held by the public with Reserve Bank of India.

The money supply is the most liquid measure of money supply as the money included in it can be easily used as a medium of exchange, that is, as a means of making payments for transactions. Other deposits of Reserve Bank of India include the following items:

(i) Deposits of Institutions such UTI, IDBI, IFCI, NABARD etc.

(ii) Demand deposits of foreign Central Banks and Foreign Governments.

(iii) Demand deposits of IMF and World Bank.

It may be noted that other deposits of Reserve Bank of India constitute a very small proportion.

Money Supply M2:

M_2 is a broader concept of money supply in India than M_1. In addition to the three items of M_1, the concept of money supply M_2 includes savings deposits with the post office savings banks. Thus,

$M_2 = M_1$ + Savings deposits with the post office savings banks.

The reason why money supply M_2 has been distinguished from M_1 is that saving deposits with post office savings banks. However, saving deposits with post offices are more liquid than time deposits with the banks.

Money Supply M3 or Broad Money:

M_3 is a broad concept of money supply. In addition to the items of money supply included in measure M_1, in money supply M3 time deposits with the banks are also included. Thus

$M_3 = M_1$ + Time Deposits with the banks.

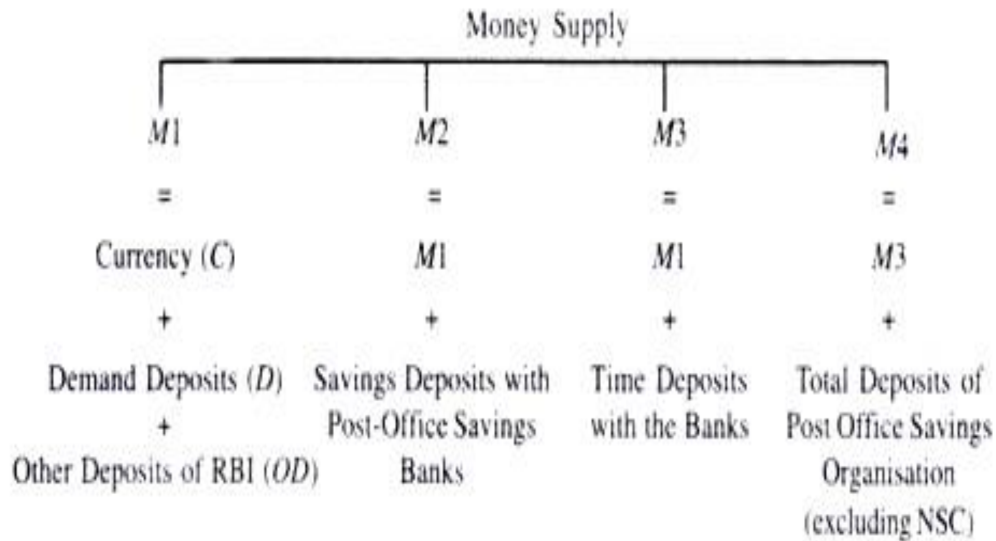
It is generally thought that time deposits serve as store of value and represent savings of the people and are not liquid as they cannot be withdrawn through drawing cheque on them. However, since loans from the banks can be easily obtained against these time deposits, they can be used if found necessary for transaction purposes in this way. Further, they can be withdrawn at any time by forgoing some interest earned on them. It is important as it includes long term deposits.

It may be noted that recently M3 has become a popular measure of money supply. The working group on monetary reforms under the chairmanship of Late Prof. Sukhamoy Chakravarthy recommended its use for monetary planning of the economy and setting target of the growth of money supply in terms of M3.

Money Supply M4:

The measure M4 of money supply includes not only all the items of M_3 described above but also the total deposits with the post office savings organization. However, this excludes contributions made by the public to the national saving certificates. Thus,

M4 = M3 + Total Deposits with Post Office Savings



Determinants of Money Supply: concept of money supply is composed of currency held by the public (Cp) and demand deposits with the banks (D). Thus

$M = C_P + D$….. (i)

Where

M = Total money supply with the public

C_P = Currency with the public

D = Demand deposits held by the public

The two important determinants of money supply as are

(a) The amounts of high-powered money which is also called Reserve Money by the Reserve Bank of India and

(b) The size of money multiplier

DETERMINANTS OF MONEY SUPPLY-

The determinants of money supply are both exogenous and endogenous which can be described broadly as: the minimum cash reserve ratio, the level of bank reserves, and the desire of the people to hold currency relative to deposits. The last two determinants together are called the monetary base or the high powered money.

1. The Required Reserve Ratio

The required reserve ratio is an important determinant of the money supply. An increase in the required reserve ratio reduces the supply of money with commercial banks and a decrease in required reserve ratio increases the money supply. The RRI is the ratio of cash to current and time deposit liabilities which is determined by law. Every commercial bank is required to keep a certain percentage of these liabilities in the form of deposits with the central bank of the country. the short-term assets along with the cash are regarded as the liquid assets of a commercial bank. In India the statutory liquidity ratio (SLR) has been fixed by law as an additional measure to determine the money supply.

2. The Level of Bank Reserves

The level of bank reserves is another determinant of the money supply. Commercial bank reserves consist of reserves on deposits with the central bank and currency in their tills or vaults. It is the central bank of the country that influences the reserves of commercial banks in order to determine the supply of money. The central bank requires all commercial banks to hold reserves equal to a fixed percentage of both time and demand deposits. These are legal minimum or required reserves.

3. Public's Desire to Hold Currency and Deposits

People's desire to hold currency relative to deposits in commercial banks also determines the money supply. If people are in the habit of keeping less in cash and more in deposits with the commercial banks, the money supply will be large. This is because banks can create more money with larger deposits. On the contrary, if people do not have banking habits and prefers to keep their money holdings in cash, credit creation by banks will be less and, the money supply will be at a low level.

High Powered Money and the Money Multiplier

High-powered money is the sum of commercial bank reserves and currency (notes and coins) held by the public. High powered money is the base for the expansion of bank deposits and creation of the money supply. The supply of money varies directly with changes in the monetary base, and inversely with the currency and reserve ratios.

4. Other Factors

   The money supply is a function not only of the high-powered money determined by the monetary authorities, but of interest rates; income and other factors. The latter factors change the proportion of money balances that the public holds as cash. Changes in business activity can change the behavior of banks and the public and thus affect the money supply. Hence the money supply is not only an exogenous controllable item but also an endogenously determined item.

Value of Money – Index Numbers

Value is the ratio of exchange between two goods, and money measures that value through price. The value of money is the quantity of goods in general that will be exchanged for one unit of money. The value of money is its purchasing power, i.e., the quantity of goods and services it can purchase.

The value of money does not remain constant over time. It rises or falls and is inversely related to the changes in the price level. A rise in the price level means a fall in the value of money and a fall in the price level means a rise in the value of money. Thus, changes in the value of money are reflected by the changes in the general level of prices over a period of time. Changes in the general level of prices can be measured by a statistical device known as 'index number.'

Index numbers are intended to measure the degree of economic changes over time. These numbers are values stated as a percentage of a single base figure. Index numbers are important in economic statistics. Bowley stated that "Index numbers are used to gauge the changes in some quantity which we cannot observe directly".

Types of Index Numbers

1. Simple Index Number: A simple index number is a number that measures a relative change in a single variable with respect to a base. These types of Index numbers are constructed from a single item only.

2. Composite Index Number: A composite index number is a number that measures an average relative changes in a group of relative variables with respect to a base. A composite index number is built from changes in a number of different items.

3. Price index Numbers: Price index numbers measure the relative changes in prices of a commodity between two periods. Prices can be either retail or wholesale. Price index number is useful to comprehend and interpret varying economic and business conditions over time.

4. Quantity Index Numbers: These types of index numbers are considered to measure changes in the physical quantity of goods produced, consumed or sold of an item or a group of items.

Index number is a technique of measuring changes in a variable or group of variables with respect to time, geographical location or other characteristics. Price index number indicates the average of changes in the prices of representative commodities at one time in comparison with that at some other time taken as the base period.

According to L.V. Lester, “An index number of prices is a figure showing the height of average prices at one time relative to their height at some other time which is taken as the base period.”

Features of Index Numbers:

(i) Index numbers are a special type of average. The technique of index numbers is used to measure the relative changes in the level of a phenomenon.

(ii) Index numbers are meant to study the changes in the effects of such factors which cannot be measured directly.

iii) The technique of index numbers measures changes in one variable or group of related variables.

(iv)The technique of index numbers is used to compare the levels of a phenomenon on a certain date with its level on some previous date or the levels of a phenomenon at different places on the same date.

Construction of Index Numbers

The construction of the price index numbers involves the following steps-

1. Selection of Base Year: The first step or the problem in preparing the index numbers is the selection of the base year. The base year is defined as that year with reference to which the price changes in other years are compared and expressed as percentages. The base year should be a normal year.

2. Selection of Commodities:

The second problem in the construction of index numbers is the selection of the commodities. Since all commodities cannot be included, only representative commodities should be selected keeping in view the purpose and type of the index number.

3. Selection of prices of commodities and services-to identify the prices of selected representative goods and services. Prices can be of wholesale prices or retail prices.

The following points are to be noted while selecting prices:

(a) Prices are to be collected from those places where a particular commodity is traded in large quantities.

(b) Only the published information regarding the prices should also be utilized.

(c) In selecting individuals and institutions who would supply price quotations, care should be taken that they are not biased.

(d) Selection of wholesale or retail prices depends upon the type of index number to be prepared.

4. To represent prices in Percentages: to represent the price of all commodities in the base year by 100. Then the change prices of commodities of the year of inquiry are expressed in percentages.

5 In the process it should calculate average of prices of both in the base year as well as year of inquiry.

6. The important consideration in the construction of the index numbers is the objective for which it is constructed.

7. Selection of Method:

The selection of a suitable method for the construction of index numbers is the final step.

There are two methods of computing the index numbers:

(a) Simple index number and (b) Weighted index number.

Simple index number again can be constructed either by –

(i) Simple aggregate method, (ii) Simple average of price relative's method.

Weighted index number can be constructed either by

(i) Weighted aggregative method, (ii) Weighted average of price relative's method.

The choice of method depends upon the availability of data, degree of accuracy required and the purpose of the study.

Construction of Price Index Numbers-

Simple Price Index Numbers-

Price index number is constructed giving equal weights to all commodities is called simple price index number, in this case, all commodities are given equal importance. The average price is calculated simply dividing the sum of prices by number of commodities.

$$simple\ price\ index\ of\ current\ year = \frac{\text{simple average price of current year}}{simple\ average\ price\ of\ base\ year} * 100$$

Specimen of a simple price index number

	Price in the base year 2000 (Po)	**Index Number of the base year**	**Prices in the current year 2007 (P1)**	**Index Number of the current year**
A	20	100	40	200
B	40	100	120	300
C	2	100	4	200
D	.50	100	1	200
E	1	100	3	300
F	1	100	3	300
G	2	100	4	200

		700/7=100		1700/7=242.8

The above table helps us to understand that the price index of the current year is 242.8 % as compared to the base year of 142.85. Thus the general price level is 1.5 times higher. (242.8-100= 142.85). The weight age given to all the commodities is equal, and this is considered as a drawback of this method.

Weighted Price Index Numbers-

Under weighted price index numbers, different weights are assigned to the items according to their relative importance. Weights used are the quantity weights. Weights are assigned based on the income spent on the commodities.

Specimen of Weighted index Numbers

Commodities	**Price in the Base year**	**Weighted Index for Base year**	**Current Prices**	**Weighted Index for current year**
A	20	100*2=200	40	200*2-=200
B	40	100*3=300	120	300*3=900
C	2	100*2=200	4	200*2=400
D	.50	100*1=100	1	200*100=200
E	1	100*1=100	3	300*100=300
F	1	100*2=200	3	300*1=300
G	2	100*1=100	4	200*2=400
		1200/12=100		3000/12=250

Note: Weights are assigned based on the relative importance of the commodity in the consumer's budget.

Thus according to the weighted index numbers, the general price level for the current year has increased by 1.5 times as in the base year.

Difficulties in calculating index numbers-

Conceptual difficulties-

a. Vague Concept of Value of Money

The concept of value of money is vague and abstract. The value of money is measured through the changes in general price level over a period of time. But many argue that the concept of general price level is abstract. Practically, it is impossible to include all the prices of all commodities that are available in the market.

b. Inaccurate Measurement

A change in general price level is not the indicator same changes in prices of all the commodities, and thus accurate calculation of general price level is impossible.

c. Reflect General Changes

Index numbers cannot measure the changes in value of money for the general public. The reason quoted here is that the general public will not purchase goods from wholesale markets. Retail markets play a major role here, but the details of prices of retail market are neither available nor same in all outlets. Thus it is difficult to reflect the general changes through index numbers.

Practical difficulties-

a. Selection of Base Year

The major problem is with the choice of a base year. Two criteria for the selection of' base year are that it must show economic stability and it must not be too distant from the given year. The base period must not coincide with abnormally high or low prices. But it is very difficult to get a 'normal year' free from any economic disturbances. If the base year is too distant from the current year, it is possible that the pattern of consumption may change considerably. New types of commodities may be introduced and consumers may change over to these types of commodities which are not comparable with the similar types used in the base period.

b. Selection of Items

The goods that are chosen are based on current spending habits and incomes of consumers. Different classes of people buy different kinds of goods. Therefore, it is difficult to choose all kinds of commodities.

The other problem that exists is as most commodities are subject to frequent changes in quality. They are subjective to price change with improvement in quality of the product one thus may face trouble in assessing the real nature of the price change.

c. Difficulty in obtaining statistical information about prices.

Data or statistics collected are often unreliable and less accurate. As a result, estimates based on such data are bound to be unreliable.

d. Assigning weights

Weight age should be unbiased, but the major problem in weighted index numbers is assigning weight to various representative commodities. As there is no specific rules are procedure to assign weights, they are assigned arbitrarily.

e. Employing a proper method of averaging.

There are several methods for averaging like arithmetic averages, statistical averages, mean, mode etc. the use of different method will yield different results, and thus methods of averaging should be selected with great care.

Use difficulties-

a. Measurement of its usefulness

The construction of index numbers for one purpose may not serve the utility for another. Therefore comparison for over a period of time and place will not be helpful.

b. Difficult for international comparisons.

The variations in quality, price structure and different base years in the construction of index numbers will differ from country to country and thus comparative between the countries is not helpful.

c. It only highlights on general changes

The study only indicates general changes in the value of money and not individual's money and purchasing power.

d. Does not accommodate dynamic elements.

There is exact mathematical accuracy and it only highlights the trends in various price situation of a country.

Advantages of Index numbers-The following are the advantages of index numbers

a. Cost of living index

   The index numbers are helpful in understanding the changes in the cost of living in the country. Index numbers are helpful to make changes in wages in accordance with the change in the cost of living index.

b. Measurement of value of money

   As index numbers reflect changes in prices of goods and services, it indicates the inflationary and deflationary pressures of the economy. Thus it acts as a measuring yard stick to check the price levels and come with policy measures to help the economy from cyclical fluctuations.

c. State of affairs in foreign trade

   It helps and depicts the actual trend of trade of a country.

d. Production trends

   It helps in understanding the trends of production in a country and thus helping the country to come up with appropriate industrial policies.

e. Planned economy

   Index numbers are helpful for the planning authorities to secure accurate information of the changing economic scenario of a country. It acts as base for policy formulation.

Limitations of index numbers

a. Index numbers are prepared with a specific perspective and thus are not helpful for utilization of it for other purposes. Thus its utility is limited.
b. Comparison of consumption process through index number will not provide correct patterns as consumption process is subjective to change with change in time.

c. Index numbers lack mathematical exactness. They only indicate broad trends of the changing economic conditions.
d. It is an indicator of changes in price and not accurate indicator of change in value of money.
e. There is no scientific assignment of weights to different goods and services and thus are highly arbitrary in nature.

Quantity Theory of Money: Cash Transaction Approach

Jean Bodin, a social philosopher of 16th century France, is considered as the chief originator of the quantity theory of money. By 20th century, the theory had received sophisticated treatment in the hands of Fisher, Pigou and Keynes.

The latest version of the old classical quantity theory of money is given by an American Economist. Prof. Irving Fisher. Prof. Fisher's version of the quantity theory of money is based upon an essential function of money as a medium of exchange. The transactions version of the quantity theory of money was provided by the American economist Irving Fisher in his book- The Purchasing Power of Money (1911).

According to this theory, the purchasing power of money depends upon the quantity of money relatively to the amount of things to be purchased. Thus, if the quantity of money is large in relation to the goods that are to be exchanged for it, the general prices will be high and the value of money low. Hence, "Other things remaining the same, if the quantity of money is doubled, the value of money is halved; and alternatively, if the quantity of money is halved, the value of money is doubled."

According to Fisher, "Other things remaining unchanged, as the quantity of money in circulation increases, the price level also increases in direct proportion and the value of money decreases and vice versa". The relation between the quantity of money and price is direct. According to the theory, a proportionate change in the price level will result in certain changes in the quantity of money.

Fisher's quantity theory is best explained with the help of his famous equation of exchange

$$MV = PT$$

or

$$P = MV/T$$

The theory asserts that the value of money or the price level is determined by the demand for and supply of money.

Supply of money = Demand for Money

Or

Total value of money expenditures in all transactions = Total value of all items transacted

$$MV = PT$$

or

$$P = MV/T$$

Where,
M is the quantity of money
V is the transaction velocity
P is the price level.
T is the total goods and services transacted.

The equation of exchange is an identity equation, i.e., **MV** is identically equal to **PT** (or **MV** = **PT**). The equation states the fact that the actual total value of all money expenditures (**MV)** always equals the actual total value of all items sold (**PT**).

Thus,

i. Supply of Money:

The supply of money consists of the quantity of money in existence **(M)** multiplied by the number of times this money changes hands, i.e., the velocity of money **(V).** In Fisher's equation, **V** is the transactions velocity of money which means the average number of times a unit of money turns over or changes hands to effectuate transactions during a period of time.

Thus, **MV** refers to the total volume of money in circulation during a period of time. Since money is only to be used for transaction purposes, total supply of money also forms the total value of money expenditures in all transactions in the economy during a period of time.

ii. Demand for Money:

Money is demanded not for its own sake (i.e., for hoarding it), but for transaction purposes. The demand for money is equal to the total market value of all goods and services transacted. It is obtained by multiplying total amount of things (**T)** by average price level (**P**).

Thus, Fisher's equation of exchange represents equality between the supply of money or the total value of money expenditures in all transactions and the demand for money or the total value of all items transacted.

Irving Fisher used the equation of exchange to develop the classical quantity theory of money, i.e., a causal relationship between the money supply and the price level. On the assumptions that, in the long run, under full-employment conditions, total output (T) does not change and the transactions velocity of money (V) is stable, Fisher was able to demonstrate a causal relationship between money supply and price level.

In this way, Fisher concludes, "… the level of price varies directly with the quantity of money in circulation provided the velocity of circulation of that money and the volume of trade which it is obliged to perform are not changed". Thus, the classical quantity theory of money states that V and T being unchanged, changes in money cause direct and proportional changes in the price level.

Irving Fisher further extended the equation of exchange so as to include demand (bank) deposits (M') and their velocity, (V') in the total supply of money.

Thus, the equation of exchange becomes:

$$MV + M'V' = PT$$

or
$$P = \frac{MV + M'V'}{T}$$

Thus, according to Fisher, the level of general prices (P) depends exclusively on five definite factors:

(a) The volume of money in circulation (M);

(b) Its velocity of circulation (V);

(c) The volume of bank deposits (M');

(d) Its velocity of circulation (V'); and

(e) The volume of trade (T).

The transactions approach to the quantity theory of money maintains that, other things remaining the same, i.e., if V, M', V', and T remain unchanged, there exists a direct and proportional relation between M and P; if the quantity of money is doubled, the price level will also be doubled and the value of money halved; if the quantity of money is halved, the price level will also be halved and the value of money doubled.

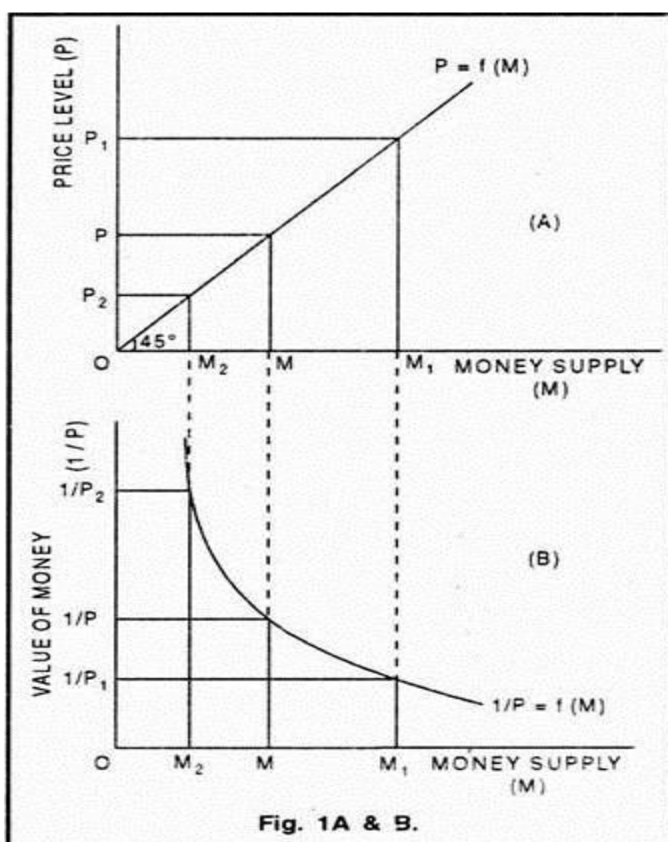


Fig. 1A & B.

Thus the effects of money supply and price level are graphically explained**.**

(i) In Figure 1-A, when the money supply is doubled from OM to OM_1, the price level is also doubled from OP to OP_1. When the money supply is halved from OM to OM_2, the price level is halved from OP to OP_2. Price curve, P = f (M), is a 45° line showing a direct proportional relationship between the money supply and the price level.

(ii) In Figure 1-B, when the money supply is doubled from OM to OM_1.

Value of money is halved from O1/P to O1/P_1 and when the money supply is halved from OM to OM_2, the value of money is doubled from O1/P to O1/P_2.

The value of money curve, $1/P = f(M)$ is a rectangular hyperbola curve showing an inverse proportional relationship between the money supply and the value of money.

Assumptions of the Fisher's equation-

1. Constant Velocity of Money:

According to Fisher, the velocity of money (V) is constant and is not influenced by the changes in the quantity of money. The velocity of money depends upon exogenous factors like population, trade activities, habits of the people, interest rate, etc. These factors are relatively stable and change very slowly over time. Thus, V tends to remain constant so that any change in supply of money (M) will have no effect on the velocity of money (V).

2. Constant Volume of Trade or Transactions:

Total volume of trade or transactions (T) is also assumed to be constant and is not affected by changes in the quantity of money. T is viewed as independently determined by factors like natural resources, technological development, population, etc., which are outside the equation and change slowly over time. Thus, any change in the supply of money (M) will have no effect on T. Constancy of T also means full employment of resources in the economy.

3. Price Level is a Passive Factor:

According to Fisher the price level (P) is a passive factor which means that the price level is affected by other factors of equation, but it does not affect them. P is the effect and not the cause in Fisher's equation. An increase in M and V will raise the price level. Similarly, an increase in T will reduce the price level.

4. Money is a Medium of Exchange:

The quantity theory of money assumed money only as a medium of exchange. Money facilitates the transactions. It is not hoarded or held for speculative purposes.

5. Constant Relation between M and M':

Fisher assumes a proportional relationship between currency money (M) and bank money (M'). Bank money depends upon the credit creation by the commercial banks which, in turn, are a function of the currency money (M). Thus, the ratio of M' to M remains constant and the inclusion of M' in the equation does not disturb the quantitative relation between quantity of money (M) and the price level (P).

6. Long Period:

The theory is based on the assumption of long period. Over a long period of time, V and T are considered constant.

Thus, when M', V, V' and T in the equation $MV + M'Y' = PT$ are constant over time and P is a passive factor, it becomes clear, that a change in the money supply (M) will lead to a direct and proportionate change in the price level (P).

Criticisms of Quantity Theory of Money:

The quantity theory of money as developed by Fisher has been criticised on the following grounds:

1. Unrealistic assumptions

   The assumption other things remaining same does not work practically and thus lacks applicability.

   It was argued that assuming M and V as independent variables is misleading and unrealistic as velocity of circulation of money will change automatically with change in supply of money. In reality there is no constant, well defined and unchangeable relation between M and M'.

   Another assumption that M and V' are independent and will not influence each other was also wrong and misleading. In reality any change in V' becomes inevitable consequent upon a change in M.

   Fisher assumed that M and T were independent of each other was also wrong. T can never remain constant with consequent change in M.

   Fisher assuming P as a passive factor is wrong. Price at times can be an active factor as it is influenced by various factors. Price change can occur with influence of various other factors other than M.

   Thus all the conditions put by Fisher that M, M', V, V' and T independent of each other was rejected.

2. It is a long term analysis of money

   The quantity theory of money has been criticised on the ground that it provides a long-term analysis of value of money. It throws no light on the short-run problems. Keynes has aptly remarked that "in the long-run we are all dead". Actual problems are short-run problems. Thus, quantity theory has no practical value.

3. Fails to explain how changes in money supply will influence price level

   It is simply a factual statement which reveals that the amount of money paid in exchange for goods and services (MV) is equal to the market value of goods and services received (PT) The equation does not tell anything about the causal relationship between money and prices; it does not indicate which the cause is and which is the effect relationship.

4. No direct and proportional relationship between quantities of money and price level

   Keynes criticized the classical quantity theory of money on the ground that there is no direct and proportionate relationship between the quantity of money (M) and the price

level (P). A change in the quantity of money will influence prices indirectly through its effects on the rate of interest, investment and output.

The effect on prices is also not predictable and proportionate. It all depends upon the nature of the liquidity preference function, the investment function and the consumption function.

5. It is a static theory

   The quantity theory assumes that the values of V, V', M' and T remain constant. But, in reality, these variables do not remain constant. The assumption of constancy of these factors makes the theory a static theory and renders it inapplicable in the dynamic world.

6. Theory is incomplete

   Fisher's transactions approach is one- sided. It takes into consideration only the supply of money and its effects and assumes the demand for money to be constant. It ignores the role of demand for money in causing changes in the value of money.

7. Theory ignores rate of interest

   Any change in quantity of money will bring about the change rate of interest, theory ignored these facts.

8. The theory highlights more on general price levels than on relative prices. Relative price changes are more significant as they are caused by changes in monetary factors.

Cash Balance Approach

The cash balance version of the quantity theory of money, though found in earlier writings of Locke, Petty and Cantillon became popular only in the twentieth century.
Dr. Marshall, some Cambridge economists, specially Pigou, Robertson, Keynes including R.G. Hawtrey, popularized and adhered to a slightly different version of the quantity theory of money, known as the cash balance approach.

According to cash balance approach, the value of money depends upon the demand for money. But the demand for money arises not on account of transactions but on account of its being a store of value. Money has two characteristics—flatness and roundness, "money sitting and money on wings" are to serve as a store of value and as a medium of exchange. "In the one use money piles up, in the other it runs round."

The cash balance approach relates the process of determination of the value of money to cash the subjective valuations of individuals who are the real force behind all economic activities. The demand for money arises from the fact that holding of money has great utility, as when it is held (hoarded) it acquires wealth value. It is interpreted with reference to the 'store of value' function of money in the cash balance. It is, thus, the demand for 'money sitting' rather than money 'on wings' that matters.

In determining the amount of these cash balances, the individuals and institutions are guided only by their real value. Thus, an individual is concerned with the extent of his liquid command over real resources. The community's total demand of money balances constitutes a certain proportion of its annual real national income which the community seeks to hold in the form of money.

The cash balances approach considers the demand for money not as a medium of exchange but as a store of value. Robertson expressed this distinction as money "on the wings" and money "sitting". It is "money sitting" that reflects the demand for money in the Cambridge equations.

The Cambridge equations show that given the supply of money at a point of time, the value of money is determined by the demand for cash balances. When the demand for money increases, people will reduce their expenditures on goods and services in order to have larger cash holdings. Reduced demand for goods and services will bring down the

price level and raise the value of money. On the contrary, fall in the demand for money will raise the price level and lower the value of money.

Marshall, Pigou and Robertson focussed their analysis on the factors that determine individual demand for holding cash balances. Although, they recognized that current interest rate, wealth owned by the individuals, expectations of future prices and future rate of interest determine the demand for money, they however believed that changes in these factors remain constant or they are proportional to changes in individual's income

The Cambridge economists have attempted to express the relationship between the supply of and demand for money by formulating cash balance equations.

1. **Dr. Marshall's equation**

M=KPY,

M- It is total supply of money, i.e., total amount of currency plus demand deposits in the banks;

P-refers to the price level;

K- represents that fraction of the real income which the public desires to hold in the form of money;

Y- It is the real aggregate real income.

Marshall opines that the price level is directly proportional to the money supply (M) and indirectly proportional to the aggregate real income (Y), as M and Y are constant and given, P will fall with increase in K and vice versa. The value of money can be derived by dividing the total quantity of goods which the public desires to hold out of the given income (KY) by the total supply of money (M).

Thus the price level P=**KY/M**

As per Marshall's equation, the value of money is more influenced not only by changes in M, but also by changes in K. Any change in K can influence P, even though the supply of money is given and constant.

Thus the price level P=M/KY.

2. Pigou's Equation

Pigou was the first Cambridge economist to express the cash balances approach in the form of an equation:

$$P= KR/M$$

Where P stands for the value of money or the purchasing power of money;

M represents the supply of Money,

R the total national income and

K represents that fraction of R for which people wish to keep cash.

The demand for money, according to Pigou, consists not only of legal money or cash but also bank notes and bank balances. Thus, Pigou modifies his equation as

$$P= KR/M \{C+h (1-C)\}$$

Where c is the proportion of total real income actually held by people in legal tender including token coins,

(1-c) is the proportion kept in bank notes and bank balances,

and h is the proportion of actual legal tender that bankers keep against the notes and balances held by their customers.

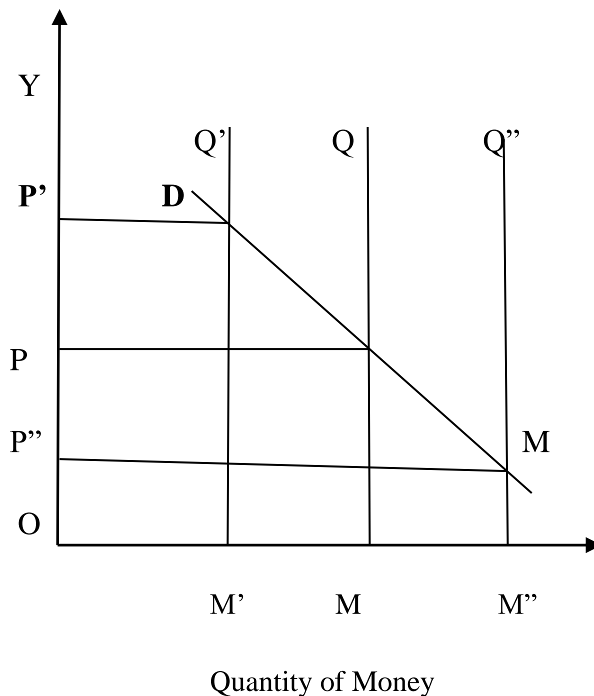
According to the above equation, P varies directly with K or R, and inversely with M.

If now is P interpreted as price level as in the transactions equation, then Pigou's equation can be written as-

$$P=M/KR$$

Pigou argues that K was more significant than M for explaining changes in the purchasing power of money. Thus value of money will depend upon the people to hold money.

Assuming K, R, as constants, then the two equations given will make the demand curve for as a rectangular hyperbola curve implying unitary elastic demand for money in the graphical representation.



In the above graph, DM is the demand curve for money and QM, Q'M', and Q"M" are the supply curves of money drawn on the assumption that the supply of money is fixed at a point of time. The value of money or Pigou's purchasing power of money P is taken on the vertical axis. The figure shows that when the supply of money increases from OM to OM", the value of money is reduced from OP to OP". The fall in the value of money by P P", exactly equals the increase in the supply of money by MM". Similarly, when supply of money is decreased from OM TO OM', the value of money will rise to OP", which attributes unitary elastic demand for money.

Pigou's equation attempt to explain the behavior of people why at times people wish to hold more money than at other times where they hold less income in form of money and he says it depends on inflationary and deflationary conditions of the economy.

3. **Robertson's Equation**

Robertson formulated an equation similar to that of Pigou. The only difference between the two being that instead of Pigou's total real resources **R**, Robertson gave the volume of total transactions **T**. The Robertson equation is

$$\mathbf{P = M/KT}$$

P- Price level;

M- Supply of Money;

T- the total volume of goods and services purchased during a year by the community.

K- is the proportion of the total amount of goods and services (T) which people wish to hold in the form of cash balances.

As per Robertson's equation, P changes directly as M, and inversely as K or T.

If P is taken as the value of money instead of the price level as in Pigou's equation, then Robertson's equation exactly resembles Pigou's P = kT/M.

4. Keynes Equation

Keynes in his A Tract on Monetary Reform (1923) gave his Real Balances Quantity Equation as an improvement over the other Cambridge equations. According to him, people always want to have some purchasing power to finance their day to day transactions.

n =pk or p=n/K

n - Represents the total supply of money in circulation;

p- Represents general price level;

k- is the total quantity of consumption units which the people decide to keep in form of cash.

If **k** is constant, a proportionate increase in **n** (quantity of money) will lead to a proportionate increase in **p** (price level).

This equation can be expanded by taking into account bank deposits. Let k be the number of consumption units in the form of bank deposits, and r the cash reserve ratio of banks, then the expanded equation is

n = p (k+ rk')

or

p=n/k+rk'

r represents the ratio of bank's cash reserves to their deposits;

k' indicates the number of consumption units that the community decides to hold in the form of bank deposits.

As per this equation, if k, k' and r are constant, p will change in exact proportion to the change in n.

Keynes regards his equation superior to other cash balances equations. The other equations fail to point how the price level (**p**) can be regulated. Since the cash balances (**k**) held by the people are outside the control of the monetary authority, p can be regulated by controlling n and **r**. It is also possible to regulate bank deposits **k'** by appropriate changes in the bank rate. So **p** can be controlled by making appropriate changes in **n, r** and **k'** so as to offset changes in **k.**

Criticism of Cash balance Approach

The cash balances approach to the quantity theory of money has been criticized on the following counts:

1. The theory is based on the assumption that the demand for money has uniform unitary elasticity or the demand for money is unity which is unrealistic.

2. The theory does not analyze all the determinants of the demand for money, it ignores speculative motive for holding money.

3. The purchasing power of money is restricted to only consumption goods and does not consider investment goods.

4. The theory has taken 'k' in narrow view. The amount of cash that is k to be held by the public is determined by their real income 'R'. K is also determined by various other factors like price level, habits of the people, prevailing economic and political conditions of the country, is not considered.

5. The price level does not measure the Purchasing Power; the price level in both equations does not measure the purchasing power of money. Measuring the price level in consumption units implies that cash deposits are used only for expenditure on

current consumption. But in fact that they are held for "a vast multiplicity of business and personal purposes." By ignoring these aspects the Cambridge economists have committed a serious mistake.

6. As the goods and services are expressed in different types of units, it is difficult to have accurate measurement of the real income of the country.

7. The theory does not offer a comprehensive treatment of the various forces which lead to changes in the price level.

Inflation and Deflation- Types, causes and its effects

Inflation is a global phenomenon. Almost all the countries are afflicted with inflation, and thus as been the most followed concept by economist. For a layman inflation means is a sizeable and a rapid increase in the general price level. Inflation means rapidly rising prices which reduces the purchasing power of money.

Definitions ---

Crowther defines inflation as –'a state in which the value of money is falling i.e., the prices are rising'.

Shaphiro defines inflation as –'a persistent and appreciate rise in general level of prices'.

Coulborn – 'too much money chasing too few goods'.

Kemmer – 'inflation is too much money and deposit currency that is too much currency in relation to the physical volume of business being done'.

Keynes –'inflation is rise in price level which comes into existence after the stage of full employment'.

He distinguishes between the two types of price rise—Rise in price accompanied by increase in production and rise in price not accompanied by such an increase in output. Any rise in price up to full employment levels is a welcome feature; beyond the stage of full employment it is harmful to the country. Thus inflation refers to a stage where there is a rise in price level after full employment has been attained.

Two approaches to inflation where there is a rise in price level after full employment has been attained—

1 Quantity theory of money approach

This approach is based on the quantity theory of money, and considers inflation as a purely monetary phenomenon. The cause for inflation was rise in quantity supply of money. This theory was subjective criticism as it could not give clarity on the causes for inflationary pressures.

2. Excess demand approach.

   This approach was developed by Cambridge economists, with special reference to Keynes. They opined that inflation occurs when total demand for goods exceeds total supply of goods at current prices.

   The reasons for excess demand arises mainly due to-

   1. War period

      The government expenditure will definitely increase during war time. This leads in substantial rise in demand for goods and will start showing rising trend during war time.

   2. Planning period

      Excess demand for goods and services can also arise in the period of developmental planning.

   3. Period of rapid technological improvement

      Period of technological developments will necessitate fresh investments in various sectors of the economy, this naturally will cause for an increase in demand for various types of investment goods.

   Thus, Keynesian economist and monetary economist believe this as the reason for inflation.

   The emergence of excess demand can be due to two main factors-

a. Increase in the demand for goods and services and
b. Decrease in the supply f goods and services.

Increase in the demand for goods and services

The reasons are-

1. Increase in public expenditure- It may be either due to outbreak of war or developmental activities which leads to excess demand.

2. Increase in private expenditure- any rise in private expenditure, consumption expenditure and also investment expenditure will lead to increase in demand. The cause for such increase is mainly attributed to good business conditions with increase in investments accompanied by increase in demand for factors of production. It further brings in more flow of income in the hands of factors resulting in rise in consumption ultimately pushing up for increase in demand.

3. Increase in Exports: An increase in foreign demand for goods and a service reduces the stock for home consumption leading to shortages of goods giving rise to inflationary pressures.

4. Reduction in Taxation: A cut in tax rates always leads to increasing purchasing power of the people leading to rise in demand to rise in prices.

5. Repayment of past internal debts: Any repayment of past debts by the government enhances the consumption activities of the public leading to rise in demand accompanied by price rise.

6. Rapid growth of population: An increasing population leads to rise in effective demand resulting in inflationary trends.

7. Black Money: the existence of black money in any economy will lead to rise in spending and thus contributes for increase demand.

8. Cheap money policy: very low rate of interest leads to increase in money supply which raises the demand for goods and services.

9. Deficit financing: Borrowing from the public and issue of additional currency notes by the government raises aggregate demand.

10. Increase in consumer spending has been a major factor over the period of times contributing for excess demand for goods and services.

Decrease in the supply of goods and services-

1. Shortage of supplies of factors of production- shortages in these factors reduce production of goods and services and thus market cannot meet the demand for goods leading to price rise.
2. Industrial disputes- Strikes, lockouts by trade unions causes fall in industrial production leading to reduction in the supply of goods and services in the market.
3. Natural calamities: Floods, droughts create shortage of food products and raw materials helping inflationary pressures.
4. Operation of law of diminishing returns- Old and obsoletes machines outdated method of production causes rise in cost of production there by raising the prices of the commodities.
5. Lopsided production- In such system stress is given for production of comfort and luxury goods neglecting essential and consumer goods, generates shortages in consumer goods which results in price rise.
6. Hoarding by traders- Hoarding of essential commodities for profiteering purposes creates scarcity which results in inflationary trends.

7. Hoarding by the consumers- Consumers at times stock commodities to avoid future price rise resulting in excess demand which leads to higher prices.

Types of Inflation

Economists have identifies two causes for inflation and they are

a. An increase in effective demand popularly known as demand inflation
b. An increase in production costs and known as cost inflation.

Demand –Pull inflation

The theory of demand-pull inflation relates to what may be called the traditional theory of inflation. The essence of this theory is that inflation is caused by an excess of demand relative to the available supply of goods and services at existing prices. It is caused by an increase in the aggregative effective demand for goods and services in the economy. It is the direct result of excess aggregate demand over aggregate supply.

The general process of increase in aggregate effective demand is due to-

1. An increase in supply of money is followed by fall in interest rate.
2. Fall in interest rate leads to rise in investments.
3. Increase in investments is followed by rise in money income of factors of production.
4. An increase in factor incomes results in increase in expenditure on consumption goods.
5. An increased consumption expenditure further results in increased investments.
6. The economy moves towards full employment and a further rise in investment expenditure will result in demand pull inflation.
7. It results in rise in commodity prices and factor prices leading to general shortages, rise in wages, increasing employment and rising profit margins.

This type of demand pull inflation is normally occurs post war period. It is because people rush up to give vent to their pent up demand for goods and services. With post war scenario, consumption generally increases to satisfy their long pending demand for goods. Demand inflation can be controlled by implementing effective monetary and fiscal measures.

Demand pull inflation can be explained with a diagrammatic explanation.

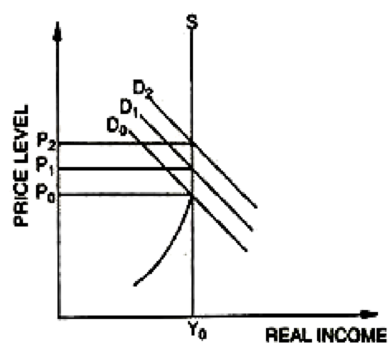


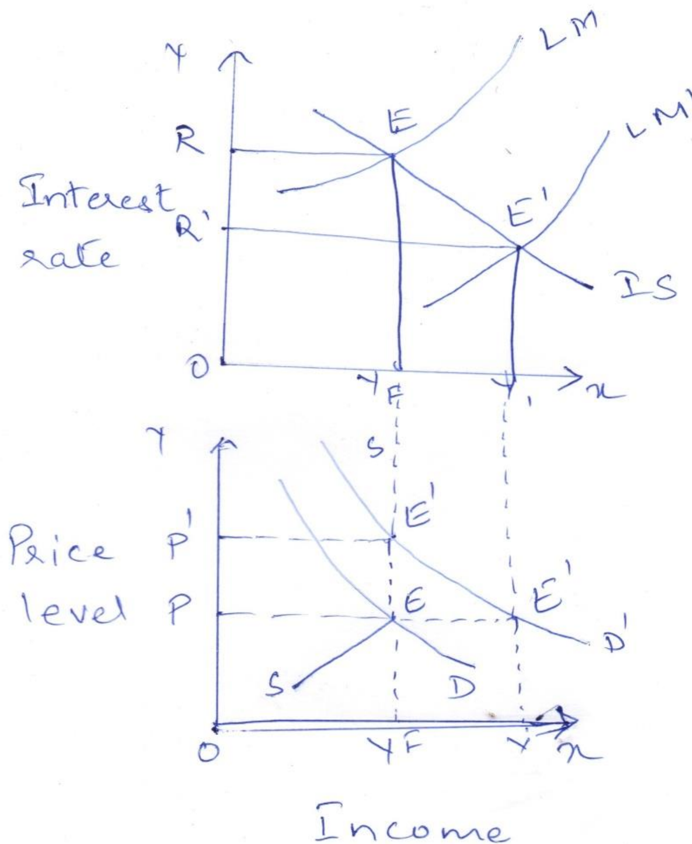
Fig. 32.5

In the above graph, real income is measured along X axis and Price level along Y axis. A pure-demand-inflation theorist tend to assume that, at income level Y_0 is corresponding to full-employment, the aggregate supply function becomes completely inelastic at this point and tends to move upwards vertically along Y axis. Any income level lower than Y_0 is not full-employment one, and increase in demand beyond D_0, to D_1 and D_2 will lead to rise in the price level from P_0 to P_1 and P_2.

Demand inflation occurs mainly due to increase in money supply and also can be the impact of increase in consumption expenditure, investment expenditure and government expenditure.

Many monetary economists emphasise that money plays a significant role in demand pull inflation. Friedman holds that inflation is purely a monetary phenomenon. According to him, change in quantity of money will lead to change in demand and with series of changes it leads to monetary expansion resulting in inflation.

This is illustrated with diagrammatic explanation--------



In the above diagram, the initial full employment situation is at P level of prices in Panel (B which is shown by the intersection of IS and LM curve at point E in panel (A), r is the rate of interest and Y^F is full employment level of income.

Any increase in quantity of money will shift the LM curve towards right to LM^1 which intersects the IS curve at E_1 and the new equilibrium is at Y_1 and the rate of interest now will be lowered at R_1 .As aggregate supply is assumed to be fixed, there will be no change in the position of IS.

With the rise in the aggregate demand, D curve will shift to D_1, creating excess demand equal to EE_1 ($=Y_FY_1$) in Panel (B). As aggregate supply is fixed the excess demand raises the price level to P_1. The rise in price level reduces the value of money, thus the LM_1 curve shifts to the left to LM.

Excess demand will not be eliminated till D_1 cuts S at E^1. This results in to a higher price level P_1 in Panel (B) and return to original equilibrium position at E in Panel (A).

“The result then is self limiting and the price level rises in exact proportion to the real value of the money supply to its original value.”

Cost Push Inflation

The theory of cost-push inflation became popular during and after the Second World War. It is also called as supply inflation. This theory maintains that prices instead of being pulled-up by excess demand are also pushed-up as a result of a rise in the cost of production. Under cost-push inflation prices rise on account of-

a. Rise in the cost of raw material and wages.
b. Increase in the profit margins.
c. Imposition of heavy commodity taxes.

An increase in wages may be caused by the fact that trade unions are well organized and powerful. When trade unions push up for wages it invariably causes cost inflation in the economy. The employers in a situation of high demand and employment are more agreeable to concede to these wage claims because they hope to pass on these rises in costs to the consumers in the form of hike in price

Cost push inflation can be caused when industrialists push up their profit margins. This is the increase in the profit margin by the firms working under monopolistic or oligopolistic conditions and as a result charging higher prices from the consumers. Such inflation is a rare occurrence.

The wage push is the important cause for cost push inflation. Any increase in wages cannot result in price rise, and the investors will also not compromise with their profit margins. Thus any rise in wages will tend to increase the cost. And cost inflation does not confine itself to sector but spreads across all sectors, reason being the various sectors of the economy are closely linked with each other. Thus cost inflation will start in one industry and soon becomes all round phenomenons. If government imposes heavy taxes on different commodities, the sellers will shift the incidence of tax on consumers through price hike and moves the economy towards cost push inflation.

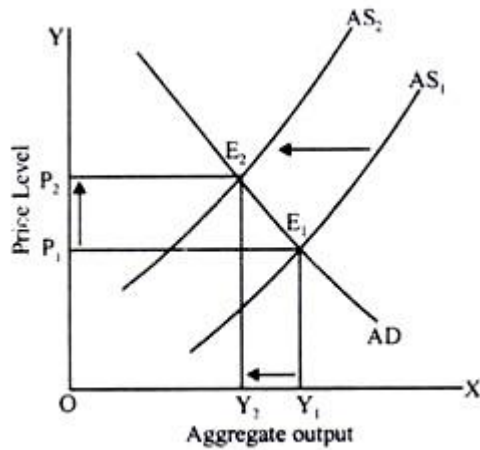


Fig. 23.3. *Cost-Push Inflation*

The cost-push inflation can also be illustrated with the help of aggregate demand and supply curves. In the above Fig, aggregate supply and demand are measured along the X-axis and price level along the Y-axis. AD is the aggregate demand curve and AS_1 and AS_2 curves are aggregate supply curves. Initially, AD will intersect AS at Point E_1, determining the price levels at OP_1 at full employment output OY_1.

\

As the cost of production rises, the aggregate supply curve would shift upward to the left from AS_1 to AS_2 and price level rises from OP_1 to OP_2. Thus, in this case when aggregate demand curve remains the same, price level rises due to rise cost of production which has caused leftward shift in the supply curve. An important feature of cost-push inflation is that this cause not only rises in price level but brings about a fall in aggregate output from OY_1 to OY_2. It shows that the price level and unemployment increase simultaneously. Under cost push inflation, full employment can be achieved only at higher price level.

The implications of cost push inflation are-

a. It is associated with unemployment.
b. If government is committed to full employment, wage increase has to be tolerated.
c. Any attempt to increase aggregate demand during the periods of employment, it leads to rise in wages and not increase in output and employment.

In reality, demand pull and cost push inflation are mutually exclusive concepts, many a times demand pull inflation will over a period of time land into cost push inflation.

An increase in prices of consumption goods is accompanied by increase in wages. With this impact prices of raw materials tend to rise naturally leading to cost push inflation.

The combined demand cum cost inflation can be explained with the help of below diagram-

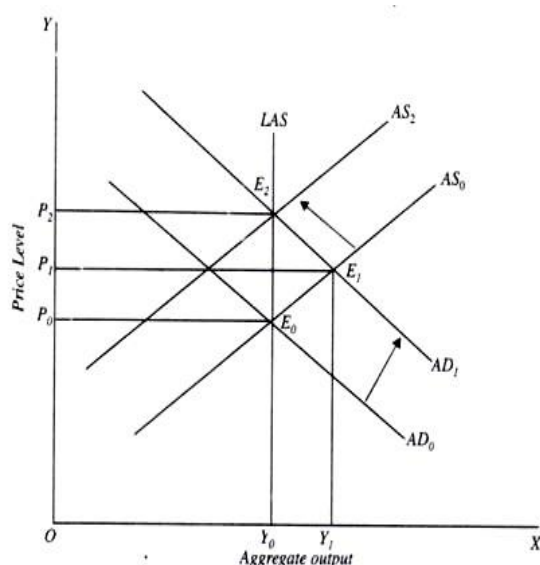


Fig. 23.6. *Interaction betwen Demand-Pull and Cost-Push Inflation*

Let us explain inflationary process which starts with demand-pull inflation**.** To begin with aggregate demand curve AD_0 and aggregate supply curve AS_0 intersect at E_0 and determine level of price P_0 and aggregate output Y_0. Assume long-run aggregate supply curve LAS also passes through point E_0 so that equilibrium level of output Y_0 also represents full-employment level of output (that is, at K_0 only natural unemployment exists) and price level P_0 also represents long-run equilibrium price level. Now suppose due to increase in Government expenditure financed by creation of new money aggregate demand curve shifts from AD_0 to AD_1. The new aggregate demand curve AD, intersects the short-run aggregate supply curve AS_0 at point E_1. As a result, in the short run price level rises to P_1 and output to Y_1.

It may be recalled, short-run aggregate supply curve is drawn assuming a given expected price level by the workers which is usually the price level prevailing in the last few years which is here taken to be P_0. Now that as a result of increase in aggregate demand price level has actually risen to P_1, workers' real wages would decline.

Therefore, in order to restore their real wages, they would demand higher money wages. When their demands for higher wages are conceded to, short-run aggregate supply curve will shift to the left. With this leftward shift in the aggregate supply curve, price level will rise further. In this way wage-price spiral will go on operating until short-run aggregate supply curve shifts to the level AS_2 and together with aggregate demand curve AD_1 determine a

long-run equilibrium at point E_2. It will be seen that both demand-pull inflation and cost-push inflation have operated together to raise price level from P_0 to P_2.

To conclude, demand-pull inflation and cost-push inflation are intertwined and operate together to determine rate of inflation over time. It is difficult to say in actual practice what part of inflation is due to demand-pull factors and what due to cost-push factors.

Types of Inflation

There are several types of inflation observed in an economic system.

I. Creeping, walking, running and galloping inflation

Such classification is made on the basis speed in which the prices increase in the economic system.

a. Creeping Inflation- Here the price rise is very slow and is mildest form of inflation government resorts to such inflation as it promotes economic growth. Many developing and UDCs prefer such price rises as it promotes economic growth. Creeping inflation is preferred as it can be effectively controlled and does not prove dangerous for the smooth functioning of the economy.

b. **Walking or trotting inflation-** when the price rise is moderate and annual inflation rate is single digit it is called walking inflation. The approximate price rise would be 5% pa. The pace of price rise here is in a greater speed and thus requires monitoring.

c. **Running inflation-** Price rise is in a much faster pace ranging between 10% to 20% pa. This level of price rise is not conducive for the economic growth of country and government has to take measures to check such a price rise.

d. **Galloping inflation or hyper inflation-** Price rise ranges between 20% to 100% pa. Such price rise is dangerous and economy can witness change in the prices at every minute this type of inflation occurs after attaining full employment levels and is a true form of inflation.

The classic examples of galloping inflation have been –

a. The great inflation of Germany after 1st world war

b. The great Chinese inflation after 2nd world war.

Such inflation is based on speed in which the price level rises in the economy. Under creeping inflation the prices rise up to 50% in 25 years period. But under walking, running and galloping inflation the price rise takes place in 10, 5 and 3 years respectively.

Comprehensive and sporadic inflation-

Comprehensive inflation is that type of inflation when the prices of all commodities register a rise in the economy. Here prices of almost all the commodities show an upward trend.

Sporadic inflation- is a sectoral inflation, where prices of only few commodities show an upward trend due to various reasons, like failure of monsoons etc. in such situation government can control inflation through price control measures.

Open and Repressed inflation—

Open inflation is a situation where government does not intervene and take measures to check or control price rise. Here market mechanism gets a free hand without any government intervention.

Hyper inflation of Germany post 1st world war was the result of non government intervention to check price rise.

Repressed inflation-

Under this inflation government quickly intervenes to check the price rise by resorting to price control mechanism and rationing of scarce resources. This mechanism is followed during wartime.

Repressed inflation many a times results in black marketing and hoarding. Here prices of essential commodities are controlled and that of non essential commodities are left free and uncontrolled.

Full inflation and Partial inflation—

This form of inflation was classified by Prof. Pigou.

Full inflation –increase in the supply of money after full employment levels will not result in increase in output and employment and thus leads to a consistent and un interrupted price rise, such price is full inflation.

Partial inflation

Rise in the price level in the pre-full employment level is called as partial inflation. Rise in prices are mild and such rise in prices helps in mobilization of resources and generates employment opportunities.

Other types of inflation are-

Peace time inflation- this form of inflation is based on time. It is the result of increased government expenditure on developmental projects in underdeveloped and developing economies.

Wartime inflation- war necessities huge expenditure and increase in the output of goods and services does not keep in pace with expansion of money supply, leading to inflationary gap resulting in rising price levels.

Post war inflation- it occurs immediately after war when the pent up demands increase with relaxation of price and physical controls by the government.

Currency inflation- an excess supply of money in relation to availability of goods and services results in inflationary rise in the price levels.

Credit inflation- encouragement of government for expansion of credit without expanding the supply of money in circulation in the process of expansion of credit, loan waivers and mobilization of resources to finance the developmental projects leads to inflation.

Wage induced inflation is the result of emergence of powerful trade unions force the employers to increase their wages, which pushes up the cost of production. it further leads to increase in demand for goods and services leading to upward movement of prices.

Scarcity induced inflation is caused without the increase in the supply of money accompanied by fall in the goods due to some unforeseen uncertainties, price tend to increase leading to scarcity induced inflation.

Mark-up inflation is seen in US; the big industrialist houses calculate their cost of production first and then add certain mark up targeted rate of profits, this increasing the price.

Effects of Inflation

A continuous and prolonged inflation results in the economic, social and political disruption of the society. Its impact can be analyzed as—

a. Effects on production

b. Effects on distribution

Effects on production—

Mild inflation is good for the growth of an economic system, but this continuous process when it reaches full employment levels; it reaches hyper inflation which proves detrimental to the economic system.

Hyper inflation disrupts the smooth functioning of the economy and thus leads to adverse effects on productivities.

They are as follows—

1. Hyper inflation depreciates the value of money, resulting in fall in savings rate of a country.
2. It drives out the foreign capital invested in the country.
3. A fall in capital accumulation results in fall in investment activities followed by fall in production.
4. It leads to diversion of productive activities. Disrupts price mechanism.
5. It reduces mobility of factors of production.
6. Hyper inflation depreciates the value of home currency and thus promotes demand for foreign currency.
7. It leads to runaway inflation and thus promotes diversion of resources from essential to luxury goods production.
8. It promotes hoarding and black market by both investors and consumers.
9. It encourages speculative activities.

Effects on distribution-

A prolonged and consistent inflation will have a deep impact on distribution of income and wealth. A prolonged inflation favors rich businessman, traders' merchants and speculators. They make all-round gains in this period. The worst affected are fixed income group like labors, salaried class, pensioners etc. Inflation throws the economic burden on the shoulders of those sections of community who have least ability to bear it.

Effects of inflation are as follows:

1. Debtor and Creditors – Debtors are the gainers while lenders are the losers.

2. Wage and salaried class: Both are sufferers as with the price rise the salaries do not raise to the proportion of rise in the prices.

3. Fixed income groups: They are the hardest hit in times of inflation as their incomes are fixed.

4. Entrepreneurs: Is the most benefitted group they experiencing wind fall gains at time of inflation.

5. Investors:

a. Investors in equities are more beneficiaries in times of inflation as they receive more dividends on their equities.

b. Investors in fixed interest yielding bonds and debentures are not gainers in inflationary periods

6. Farmers generally are beneficiaries because farm products prices go up while their cost incurred do not go up to the same extent.

Non economic consequences of inflation-

Inflation leads to social conflict in the society and brings serious political turmoil at times.

a. Can lead to political instability

b. Inflation results to fall in morality and ethics of the businessman

c. It encourages adulteration and anti social activities.

d. It leads to corruption

e. Leads to increases inequalities income and wealth.

An uncontrolled inflation sets to a chain of activities if unchecked; this would lead the economy into slump. The impact of inflation could be as follows for the following--

a. Fall in consumer demand-

Hyper inflation in times of boon leads to fall in aggregate demand. Increase in disparities of income and wealth and psychological impact of the consumers due to fall in the real income reduces the demand for consumption of goods and services. Such situation reduces the consumption of consumer goods and this adversely affects consumer goods industries and later its impact can be seen on capital goods industries.

b. Fall in investment demand

Overinvestment in boon period and fall in consumer spending cuts further investment activities. Along with these price fluctuations brings a fall in investments.

c. Fall in foreign demand-

An inflationary pressure brings a fall in demand for goods and services in foreign market leading to fall in exports. This decline if not offset by simultaneous increase in domestic market will contribute to depression in the domestic market.

Measures to check inflation:

There is a need for implementing prompt and effective anti inflationary policies to check price rise. The role of the government is very important in checking consistent price rise.

Following measures are to be taken to control inflation

Anti inflation Policy

I Monetary measures.

Monetary policy is one of the most commonly used measures taken by the government to control inflation. The central bank increases rate of interest on borrowings for commercial banks. As a result, commercial banks increase their rate of interests on credit for the public. As borrowing becomes dearer and savings will earn more returns, individuals would save money. This would reduce money supply in the market, controls inflation. Apart from this, the central bank reduces the credit creation capacity of commercial banks to control inflation.

The monetary policy of a country involves the following:

1. Rise in Bank Rate: The bank rate is the rate at which the commercial bank gets a rediscount on loans and advances by the central bank. The increase in the bank rate results in the rise of rate of interest on loans for the public. This leads to the reduction in total spending of individuals.
2. Open Market Operations (OMO): it is one of the important methods used by the central bank to reduce the credit creation capacity of commercial banks. The central bank issues government securities to commercial banks and certain private businesses. Through this method, the cash with commercial banks would be spent on purchasing government securities. As a result, commercial bank would reduce credit supply for the general public.
3. Higher reserve requirements: Here the central bank increases the reserve ratios to reduce the credit creation capacity of commercial banks. For example, when the central bank needs to reduce the credit creation capacity of commercial banks, it increases Cash Reserve Ratio (CRR). As a result, commercial banks need to keep a large amount of cash as reserve from their total deposits with the central bank. This would further reduce the lending capacity of commercial banks. Consequently, the investment by individuals in an economy would also reduce.
4. Consumer Credit Control: it is used during inflation to check the excessive spending on the part of the consumers. Consumer spending is controlled by raising the minimum initial payments, by decreasing the length of the payment period and by higher margin requirements.

II Fiscal measures-

1. Government expenditure-any cut in the government expenditure will reduce the government spending, this will help in reducing the aggregate demand and check the price rise.

2. Taxation- it is an important anti inflationary tool. To cut the excess purchasing power from the public, the rates of existing personal income tax should be increased, and new taxes should be commodities and services, so as to leave less money supply with the public to spend. This would reduce the income in the hands of the public and help in controlling inflationary pressures.

3. Public borrowing- the main aim of public borrowing is to take away excess purchasing power from the hands of the public. Public borrowings can be voluntary or compulsory and are used based on the economic conditions and inflationary situations in the country.

4. Debt management- here existing money supply is reduced by either by retirement or repayment of bank debt held by the budgetary surplus. By retiring the government securities held by the commercial banks, the power of commercial banks to lend is controlled. Government should also retire all its debt by sale of bank ineligible bonds to non bank investors like insurance companies, savings banks, individuals etc.

5. Overvaluation of domestic currency over foreign currency discourages exports and checks domestic market. By encouraging imports, it will add to the domestic stock of goods and services and absorb excess purchasing power.

III Other Measures-

1. Expansion of output- it is the best antidote to control inflation. Reallocation of resources to step up the production of goods like clothing, housing and other essential commodities will keep the prices of these under control. Efforts should also be made keep the prices of factors under control. Industrial peace, labour grievances should be addressed and liberal policy to check the domestic supply of goods, liberal imports and maintainenance of stable BOP position is important.

2. Wage Policy- wages have to be controlled to contain inflation. Wage increases as per the norms and the living cost should be maintained.

3. Price Control and Rationing – price control is used mainly to lay down the upper limit beyond which the price of the commodity cannot be increased. The prices should be fixed legally. The measures should also be taken to check the demand of a commodity and be controlled through rationing.

Deflation

Deflation is a situation where there is consistent fall in prices. It is accompanied by decreasing levels of income, output and employment levels. Deflation may also be the result of contraction of money supply

Pigou defines deflation as **that** ***state of falling prices which occurs at that time when the output of goods and services increases more rapidly than the volume of money income in the country.***

Prof Paul Einzig defines deflation as ***a state of disequilibrium in which a contraction of purchasing power tends to cause, or is the effect of, a decline of the price level.***

Only that fall in prices which result in unemployment, overproduction and fall in the economic activity are deflationary. In short, deflation is a situation in which falling prices are accompanied by falling levels of employment, output and income.

Causes of Deflation:

Deflation is a situation in which falling prices are accompanied by falling levels of employment, income and output. Deflation may be due to certain natural causes, or it may be due to a deliberate policy of the government.

The following are the important causes of deflation:

1. Fall in aggregate demand- the deficiency of aggregate demand leads to over-production and unemployment. As the income increases, the community spends a smaller proportion of its increased income on consumer goods. The reduced sale of consumer goods leads to the accumulation of stock of consumer goods and leads to over production.
2. Rise in interest rates- with rise in interest rates, people tend spend less and save more, it will lead to fall in demand and contributes for fall in prices.
3. Contractionary Monetary Policy- When the government adopts a contractionary monetary policy; it makes the availability of credit more costly by raising the rate of interest and reducing the supply of money. This results in fall in prices.
4. Reduction in Government Expenditure: If the government decides to reduce public expenditure, it will reduce national income and employment multiple times. This will reduce aggregate demand, discourage investment and affect the economic activity of

the economy adversely. Heavy taxes imposed by the government reduce the disposable income with the people. This leads to the decline in both consumption and investment expenditure and results in deflationary conditions.

5. Increasing Economic Inequalities:

Increasing inequalities of income and wealth make the rich more rich and the poor more poor. Since the marginal propensity to consume of the rich is less than that of the poor, growing inequalities of income will reduce consumption expenditure and will lead to deflationary situation.

6. Public Borrowing:

When the government borrows from the public, it results in the transfer of money from the public to the government. This reduces aggregate demand and brings deflation in the economy.

7. Psychological Factors:

Some economists feel that deflation and depression are the result of waves of optimism and pessimism. During the optimistic conditions of boom, they make over-investment. As a consequence, they fail to find buyers for their products, suffer losses, grow pessimistic about the prospects of business and curtail their productive activities. Thus, the discovery of error of optimism gives birth to the opposite error of pessimism.

8. Other Factors:

Some other non-economic and non-monetary factors, such as, wars, earth quakes, strikes, crop failures, etc. may also cause deflationary conditions.

Effects of Deflation-

It affects the entire economic system.

1. Producers and traders- it adversely affects both.

Producers are worse affected as production cost does not fall as rapidly as prices of finished goods. There always exists the gap between prices of raw materials and finished commodities in deflationary periods. In times of deflation there will be a fall in demand for goods and services, this leads to pile up of commodities, and thus blocks the capital of producer. Traders are affected as they purchase the stock at higher prices but may force to sell at lower prices. Farmers are also affected during inflationary periods.

2. Investors

Here fixed income investors are not much affected but investors of whose income in variable income investments are adversely affected

3.Salaried and labor class

Wage earners and salaried persons gain during deflation. The reason is that with the fall in prices, the wages and salaries cannot be reduced; such attempts will be strongly opposed by the trade unions. They are the beneficiaries in times of deflation

4. Consumers

The consumers generally gain due to falling prices because the purchasing power of their money rises. They are beneficiaries.

5. Debtors and creditors-

During deflation, the prices fall and the value of money rises. As a result, the creditors tend to gain and the debtors tend to lose.

Deflation also affects the general life of the economy in the following way:

1. Tax-payers are adversely affected in the deflationary period because due to falling prices, the value of money rises and the real burden of taxation increases.
2. The government faces an increase in the real burden of public debt.
3. Due to falling prices and profits, the entrepreneurs reduce output. Some small businesses may close down. This results in the unemployment of workers and employees.

4. Banking business also suffers during deflation because the number of borrowers falls sharply due to general recession in the economy.

5. Like the private sector units, the public sector enterprises also suffer losses during deflation when the prices fall.

6. Deflationary conditions lead to greater number of industrial disputes and thus create industrial unrest in the economy.

7. During deflation, the pace of economic growth slows down or even suffers a setback and the economic, social and political life of the country get disturbed.

(Yf).

Deflationary Gap

The deflationary gap is defined as a shortage of anticipated expenditure compared with the available output of goods and services at base prices. Anticipated expenditure is the net disposable income of the community. The anticipated expenditure of a community is determined by the aggregate consumption, investment and government outlays. The deflationary gap is a situation where the demand for output falls short of the available output at base prices.

Deflationary gap arises-

With the decline in either private investment or government outlays, it results to fall in the money income levels, but the real output of goods and services will not decrease in the same proportion. Thus the failure in the economy to reduce its real output in response to the decline in the real income leads to deflationary gap. Thus it is the shortage of demand in relation to the real output in the economic system.

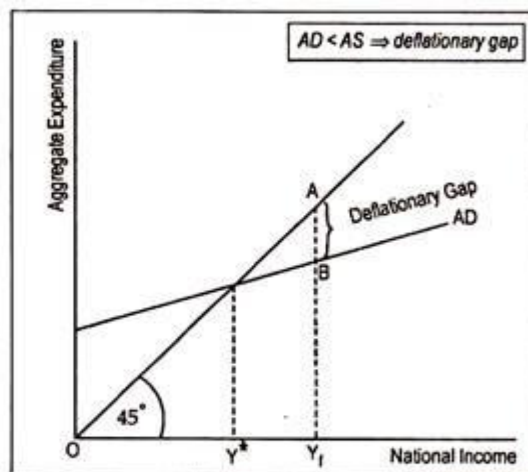


Fig. 11.7: Deflationary Gap

If the equilibrium level of income is estimated to be below the full employment level of income then emerges deflationary gap. If in the economy there arises insufficient aggregate demand, equilibrium in the economy will occur to the left of the full employment income (Y_f).

In other words, a deflationary gap shows the amount by which aggregate demand must be increased so that equilibrium level of income is increased to the full employment level. In the above Fig the equilibrium level of income is OY* while full employment output is Y_f. Thus, the economy faces unemployment situation. The distance between the 45° line and the AD line at the full employment output situation is referred as the deflationary gap. It is AB in Fig. since aggregate demand is less than the country's potential output; the economy suffers from unemployment of labour and other resources.

UNIT II

Money Market

Money Market- meaning, features and components

Money market basically refers to a section of the financial market where financial instruments with high liquidity and short term maturities are traded. Money market has become a component of the financial market for buying and selling of securities of short-term maturities, of one year or less, such as treasury bills and commercial papers.

Money market consists of negotiable instruments such as treasury bills, commercial papers and certificates of deposit. It is used by many participants, including companies, to raise funds by selling commercial papers in the market. Money market is considered a safe place to invest due to the high liquidity of securities.

Institutions of the Money Market:

The various financial institutions which deal in short term loans in the money market are its members. They comprise the following types of institutions:

1. Central Bank:

The central bank of the country is the pivot around which the entire money market revolves. It acts as the guardian of the money market and increases or decreases the supply of money and credit in the interest of stability of the economy. It does not itself enter into direct transactions. But control of the money market is through variations in the bank rate and open market operations.

2. Commercial Banks:

Commercial banks also deal in short-term loans which they lend to business and trade. They discount bills of exchange and treasury bills, and lend against promissory notes and through advances and overdrafts.

3. Non-bank Financial Intermediaries:

Besides the commercial banks, there are non-bank financial intermediaries which lend short-term funds to borrowers in the money market. Such financial intermediaries are savings

banks, investment houses, insurance companies, provident funds, and other financial corporations.

4. Discount Houses and Bill Brokers:

It emerged in England. In developed money markets, private companies operate discount houses. The primary function of discount houses is to discount bills on behalf of other. They, in turn, form the commercial banks and acceptance houses. Along-with discount houses, there are bill brokers in the money market who act as intermediaries between borrowers and lenders by discounting bills of exchange at a nominal commission. In underdeveloped money markets, only bill brokers operate.

5. Acceptance Houses:

The institution of acceptance houses developed from the exchange bankers who transferred their headquarters to the London Money Market in the 19th and the early 20 the century. They act as agents between exporters and importers and between lender and borrower traders. They accept bills drawn on merchants whose financial standing is not known in order to make the bills negotiable in the London Money Market. By accepting a trade bill they guarantee the payment of bill at maturity. However, their importance has declined because the commercial banks have undertaken the acceptance business.

All these institutions which comprise the money market do not work in isolation but are interdependent and interrelated with each other.

Instruments of the Money Market

The money market operates through a number of instruments.

1. Promissory Note:

The promissory note is the earliest types of bill. It is a written promise on the part of a businessman today to another a certain sum of money at an agreed future data. Usually, a promissory note falls due for payment after 90 days with three days of grace. A promissory note is drawn by the debtor and has to be accepted by the bank in which the debtor has his account, to be valid. The creditor can get it discounted from his bank till the date of recovery. Promissory notes are rarely used in business these days, except in the USA.

2. Bill of Exchange or Commercial Bills:

Another instrument of the money, market is the bill of exchange which is similar to the promissory note, except in that it is drawn by the creditor and is accepted by the bank of the debtor. The creditor can discount the bill of exchange either with a broker or a bank. There is also the foreign bill of exchange which becomes due for payment from the date of acceptance. The rest of the procedure is the same as for the internal bill of exchange. Promissory notes and bills of exchange are known as trade bills.

3. Treasury Bill:

The major instrument of the money markets is the Treasury bill which is issued for varying periods of less than one year. They are issued by the Secretary to the Treasury in England and are payable at the Bank of England. There are also the short-term government securities in the USA which are traded by commercial banks and dealers in securities. In India, the treasury bills are issued by the Government of India at a discount generally between 91 days and 364 days. There are three types of treasury bills in India—91 days, 182 days and 364 days.

4. Call and Notice Money:

There is the call money market in which funds are borrowed and lent for one day. In the notice market, they are borrowed and lent up to 14 days without any collateral security. But deposit receipt is issued to the lender by the borrower who repays the borrowed amount with interest on call. In India, commercial banks and cooperative banks borrow and lend funds in this market but mutual funds and all-India financial institutions participate only as lenders of funds.

5. Inter-bank Term Market:

This market is exclusively for commercial and cooperative banks in India, which borrow and lend funds for a period of over 14 days and upto 90 days without any collateral security at market-determined rates.

6. Certificates of Deposits (CD):

Certificates of deposits are issued by commercial banks at a discount on face value. The discount rate is determined by the market. In India the minimum size of the issue is Rs.

25 lakhs with the minimum subscription of Rs. 5 lakhs. The maturity period is between 3 months and 12 months.

7. Commercial Paper (CP):

Commercial papers are issued by highly rate companies to raise short-term working capital requirements directly from the market instead of borrowing from the banks. CP is a promise by the borrowing company to repay the loan at a specified date, normally for a period of 3 months to 6 months. This instrument is very popular in the USA, UK, Japan, Australia and a number of other countries. It has been introduced in India in January 1990.

Working of the Money Market:

The money market consisting of commercial banks, discount houses, bill brokers, acceptance houses, non-bank financial houses and the central bank operates through the bills, securities, treasury bills, government securities and call loans of various types.

First, the money market operates through the call loan market. In this market the commercial banks use their funds to lend for very short periods to bill brokers and dealers in stock exchange. In developed countries, even big corporations lend their dividends before distribution to earn interest for a very short period. The central bank also lends to commercial bank is for very short periods. Such loans are mostly for a week even for a day or a night and can be recalled at a very short notice. That is why a short period loan is known as call loan or call money market.

Second, the money market also operates through the bill market. The bill market is the short-period loan market. In this market, loans are made available to businessmen and the government by the commercial banks, discount houses and brokers. The instruments of credit are the promissory notes, internal bills of exchange and treasury bills.

The commercial banks discount bills of exchange, lend against promissory notes or through advances or overdrafts to the business community. Similarly, the discount houses and bills brokers lend to businessmen by discounting their bills of exchange before they mature within 90 days. On the other hand, government borrows through the treasury bills from the commercial banks and non-bank financial institutions.

Third, the money market operator through the collateral loan market for a short period. The commercial banks lend to brokers and discount houses against collateral bonds, stock, securities, etc. In case of need, commercial banks themselves borrower from the large banks and the central bank on the basis of collateral securities.

Finally, the other important sub-market through which the money market operates is the acceptance market. The merchant bankers accept bills drawn on domestic and foreign traders whose financial standing is not known. When they accept a domestic or foreign trade bill, they guarantee its payment at maturity. In recent years, the commercial banks have also stared the acceptance business.

Functions of a Money Market:

A money market performs a number of functions in an economy.

1. Provides Funds:

It provides short-term funds to the public and private institutions needing such financing for their working capital requirements. It is done by discounting trade bills through commercial banks, discount houses, brokers and acceptance houses. Thus the money market helps the development of commerce, industry and trade within and outside the country.

2. Use of Surplus Funds:

It provides an opportunity to banks and other institutions to use their surplus funds profitably for a short period. These institutions include not only commercial banks and other financial institutions but also large non-financial business corporations, states and local governments.

3. No Need to Borrow from Banks:

The existence of a developed money market removes the necessity of borrowing by the commercial banks from the central bank. If the former find their reserves short of cash requirements they can call in some of their loans from the money market. The commercial banks prefer to recall their loans rather than borrow from the central banks at a higher rate of interests.

4. Helps Government:

The money market helps the government in borrowing short-term funds at low interest rates on the basis of treasury bills. On the other hand, if the government were to issue paper money or borrow from the central bank. It would lead to inflationary pressures in the economy.

5. Helps in Monetary Policy:

A well developed money market helps in the successful implementation of the monetary policies of the central bank. It is through the money market that the central banks are in a position to control the banking system and thereby influence commerce and industry.

6. Helps in Financial Mobility:

By facilitating the transfer for funds from one sector to another, the money market helps in financial mobility. Mobility in the flow of funds is essential for the development of commerce and industry in an economy.

7. Promotes Liquidity and Safety:

One of the important functions of the money market is that it promotes liquidity and safety of financial assets. It thus encourages savings and investments.

8. Equilibrium between Demand and Supply of Funds:

The money market brings equilibrium between the demand and supply of loanable funds. This it does by allocating saving into investment channels. In this way, it also helps in rational allocation of resources.

9. Economy in Use of Cash:

As the money market deals in near-money assets and not money proper, it helps in economising the use of cash. It thus provides a convenient and safe way of transferring funds from one place to another, thereby immensely helping commerce and industry.

Functions of a Commercial Bank

Meaning of Commercial Bank

Bank is an institution which collects money from those who have in spare or who are saving it out of their income; and lend this money out to those who require it. A bank is a financial institution and a financial intermediary that accepts deposits into lending activities, either directly or through capital market. A bank connects customers with capital deficits to customers with capital surplus. Commercial Banks serve as major instrument in development of financial system of a country.

The main function of commercial banks has been summed up as- *The banks borrow to lend*. They render many valuable services. The important functions of the Commercial banks can be classified into-

1. Primary functions
2. Secondary functions.

Primary Functions

The primary functions of the commercial banks include the following:

A. Acceptance of Deposits

The banks borrow in the form of Deposits and banks mainly depend on these deposits for funding the public in the form of loans and advances. The deposits received by the bank may be of following types.

1. Time Deposits: These are the deposits made for a fixed period of time**.**

a) Fixed Deposits

These are deposits repayable after a certain fixed period. These deposits are not withdrawn able by cheque, draft or by other means. These deposits are made for a period of fixed time, which varies from 15days to a few years. A higher rate of interest is paid on these deposits. These deposits cannot be withdrawn before the expiry of the period but a loan can b taken from the bank against the security of these deposits within that period.

(b) Recurring Deposits:

In recurring deposit, the customer opens an account and deposit a certain sum of money every month. After a certain period, say 1 year or 3 years or 5 years, the accumulated amount along with interest is paid to the customer. It is very helpful to the middle and poor sections of the people. The interest paid on such deposits is generally on cumulative basis. This deposit system is a useful mechanism for regular savers of money.

(c) Cash Certificates:

Cash certificates are issued to the public for a longer period of time. It attracts the people because its maturity value is in multiples of the sum invested. It is an attractive and high yielding investment for those who can keep the funds for a long time. It is a very useful account for meeting future financial requirements at the occasion of marriage, education of children etc. Cash certificates are generally issued at discount to face value. It means a cash certificate of Rs. 1, 00,000 payable after 10 years can be purchased now, say for Rs. 20,000.

2. Demand Deposits:

These are the deposits which may be withdrawn by the depositor at any time without previous notice. It is withdraw able by cheque/draft. It includes the following

(a) Savings Deposits:

The savings deposit promotes thrift among people. The savings deposits are held by people holding fixed salaries and individuals and non-profit institutions. The rate of interest paid on savings deposits is lower than that of time deposits. These deposits are payable on demand and also drawn through cheques.

(b) Current Account Deposits:

These accounts are maintained by the people who need to have a liquid balance. Current account offers high liquidity. No interest is paid on current deposits and there are no restrictions on withdrawals from the current account. These accounts are generally in the case of business firms, institutions and co-operative bodies. Cheque

facility is made available on this type of accounts also. On behalf of the account holders, banks collect cheques, drafts, dividend warrants, postal orders etc.

B. Advancing of Loans

The commercial banks provide loans and advances in various forms to businessmen, firms and to individuals also for short periods only. This is to maintain the balance between liquidity and profitability. Banks advance loans in the following ways:

1. Overdraft:

This facility is given to holders of current accounts only. This is an arrangement with the bankers and this facility of overdrawing on the account is generally pre-arranged with the bank up to a certain limit.

It is a short-term temporary fund facility from bank and the bank will charge interest over the amount overdrawn. This facility is generally available to business firms and companies.

2. Cash Credit:

Cash credit is a form of working capital credit given to the business firms. Under this arrangement, the customer opens an account and the sanctioned amount is credited with that account. The customer can operate that account within the sanctioned limit as and when required.

It is made against security of goods, personal security etc. On the basis of operation, the period of credit facility may be extended further. One advantage under this method is that bank charges interest only on the amount utilized and not on total amount sanctioned or credited to the account.

3. Discounting of Bills:

Discounting of Bills may be another form of bank credit. The bank may purchase inland and foreign bills before these are due for payment by the drawer debtors, at discounted values, i.e., values a little lower than the face values.

The Banker's discount is generally the interest on the full amount for the unexpired period of the bill. The banks reserve the right of debiting the accounts of the

customers in case the bills are ultimately not paid, i.e., dishonored. Discounting of bills by banks provide immediate finance to sellers of goods. This helps them to carry on their business. Banks can discount only genuine commercial bills i.e., those drawn against sale of goods on Credit.

4. Loans and Advances:

It includes both demand and term loans, direct loans and advances given to all type of customers mainly to businessmen and investors against personal security or goods of movable or immovable in nature. The loan amount is paid in cash or by credit to customer account which the customer can draw at any time. Previously interest on loan was also regulated by RBI. Today banks can determine the rate but have to maintain a minimum rate known as Prime Lending Rate.

5. Housing Finance:

The commercial banks are now providing housing finance facilities to their customers. It is mainly to increase the housing facilities in the country.

6. Loans against Shares/Securities:

Commercial banks provide loans against the security of shares/debentures of reputed companies. Consumer Loans and Advances and Loans against Savings Certificates are also provided.

Secondary Functions

The secondary functions of the banks consist of agency functions and general utility functions

a. To collect and clear cheque, dividends and interest warrant.
b. To make payment of rent, insurance premium, etc.
c. To deal in foreign exchange transactions.
d. To purchase and sell securities.
e. To act as trusty, attorney, correspondent and executor.
f. To accept tax proceeds and tax returns.

General Utility Functions: The general utility functions of the commercial banks include

a. To provide safety locker facility to customers.

b. To provide money transfer facility.

c. To issue traveller's cheque.

d. To act as referees.

e. To accept various bills for payment e.g. phone bills, gas bills, water bills, etc.

f. To provide merchant banking facility.

g. To provide various cards such as credit cards, debit cards, Smart cards.

Balance sheet of a Commercial Bank

It is the statement of a commercial bank showing the financial position on a particular date by means of debit and credit balance outstanding after all the revenue and expenses terms have been transferred to the trading account on the profit and loss account.

The real financial position of a commercial bank is known after making analysis of its balance sheet. Balance sheet analysis helps us to understand-

- Net worth of a bank
- Profitability and the trends
- It helps in policy decision taking.
- It gives long term assets and liabilities of a bank.

Specimen balance sheet

Liabilities	**Assets**
1. Capital- a. Authorized capital b. Issue capital c. Subscribed Capital d. Paid-up capital	Cash – a. Cash in hand b. Deposit with central bank and other banks
2. Reserve Fund	2. Call money
3. Deposits	3. Bills discounted
4. Loans from other banks	4. Bills for collection
5. Bills payable	5. Investments
6. Bills for collection	6. Loans and advances
7. Acceptance and endorsements	7. Acceptance and endorsements

8. Contingent Liabilities	8. Buildings, furniture and other property
9. Profit and Loss	

Liabilities -

It refers to those items on account of which the bank is liable to pay an amount to others.

1. Capital-

a. authorized capital – it is the maximum amount that bank raise from the public in the form of shares.

b. Issued capital – that part of capital which is issued to the public in the form of shares.

c. Subscribed capital – one that is actually issued or subscribed by the public.

d. Paid up capital- that part of subscribed capital for which the public is called to pay.

2. Reserve fund- it constitutes accumulated profits of the bank.

3. Deposits- are received by the bank from the public. It normally constitutes the working capital of the bank.

4. Loans and advances- are the loans that bank receive from other banks.

5. Bills payable- includes those bills which bank has the responsibility to pay from its resources.

6. Bills for collection- are the total amount of bills which it has accepted to pay for its customers. This head is shown on both the columns.

7. Acceptance and endorsements- it is the accepting or endorsing the bills on behalf of the customers.

8. Contingent Liabilities- are those liabilities which are not known in advance.

9. Profit and Loss- shows the profit earnings of the bank, but is shown in this column as it has to pay certain profits to its shareholders.

Assets-

It refers to those items on account of which the bank is to receive an income from others.

1. **Cash-** all banks will keep some cash for itself to meet the requirements of its customers; banks also maintain some cash reserves with the central bankof the country, popularly known as vault cash.
2. Call money- they are those loans which are repayable to the bank on demand. They are of 3 types

a. Loans given for overnight period.
b. Loans that can be recalled on notice.
c. Short period loans for 15 days tenure.

3. Bills discounted-it shows those exchange and treasury bills that it has discounted itself. The banks collect the amount of these bills when they mature.

4. Bills for collection- these bills represent assets but after collection they become liabilities of the bank. Hence they are stated in both columns.

5. Investments– bank shows the total amount of its profit yielding assets. It shows different types of investments separately in its balance sheet. An investment in government and non government securities is also indicated separately.

6● Loans and advances- it shows the total amount of loans advances it has advances that

it has extended to its customers. These loans are given against the certain physical securities offered by the borrowers. Loans and advances are the bread and butter of the commercial banks.

7. Acceptance and endorsements-they are the total value of those exchange bills which the bank has accepted on behalf of the customer.

8. Buildings, furniture and other property-they are all the movable and immovable properties of the bank. It is also referred to as dead stocks. Banks undervalue these items deliberately in their balance sheet.

Balance sheet of a commercial bank

(Rs in crore)

Liabilities		**Assets**	
1.Capital	**454.3**	**1.Cash balances with RBI**	**3,048.2**
2.Reserves & surplus	**1733.4**	**2.Balances with other banks at call money and short notice**	**4683.4**
3. Borrowings	**32,156.7**	**3.Investments in Government& Other securities**	**10,927.2**
4. other liabilities and provisions	**3,295.3**	**4. Advances**	**16,531.6**
		5. Fixed assets **Other assets**	**577.1** **1872.2**
Total	**37,639.7**		**37,639.7**

Liquidity Vs Profitability

Banks to be able to meet demands for cash as and when they are required, a bank must not only arrange to have sufficient cash available but it must also distribute its assets in such a way that some of them can be readily converted into cash. Assets which are readily convertible into cash are called liquid assets.The shorter the length of a loan the more liquid because it will mature soon and be repayable in cash; but is less profitable because, other things being equal the rate of interest varies directly with the loss of liquidity experienced by the lender.

1. Cash in Hand: It represents a bank's holding of notes and coins to meet the immediate requirements of its customers. The general rule seems to be to hold something in the region of 4% of total assets in the form of cash.
2. Cash at the Central Bank: It represents the commercial banks' accounts with the central bank. When banks require notes or coins they obtain them from the Central Bank by drawing on their accounts
3. Money at Call and Short Notice: This consists mainly of day to day loans to the money market; it ranges between the time period of seven days and fourteen day loans to the investors and to the stock exchange. This asset is by its nature very liquid and enables a bank to recall loans quickly in order to reinforce its cash.
4. Bills Discounted: Another type of liquid asset is when the banks and the money market acquire their own portfolios of bills. By agreement the banks do not tender directly for these bills but instead buy them from the discount houses when they have two months or less to run. They also buy them in such a way that a regular number mature each week, thus providing an opportunity for reinforcing their cash bases.

5. Investment in securities: commercial banks use sizeable incomes to invest in securities, debentures, purchase of government securities for short periods the banks do not lock up their funds for longer period.

6. Loans and advances: commercial banks also allocate certain percentage of funds for giving loans against different types of collateral securities.here the bank earns sizeable interest incomes with these advances.

7. Government Securities with One Year or Less to Maturity: These securities consist of central government stocks and nationalised industries' stocks guaranteed by the government. Since they are so close to the date when they are due for redemption, i.e., repayment at their face value, they can be sold for amounts very near to that value. Thus banks can sell them to obtain cash without suffering any loss. They are very liquid assets.
8. Certificates of Deposit: These are receipts for specified sums deposited with an institution in the banking sector for a stated period of up to five years. They earn a fixed rate of interest and can be bought and sold freely.

   Commercial banks maintain

Credit Creation

Hartley withers, J M Keynes, Halm and Sayers were the firm economists who emphasized on the functioning of modern banks in credit creations.

Sayers opined" Bankers are not merely purveyors but also, manufactures of money.

Money is created when the banks through their lending activities make a net addition to the total supply of money in the economy. Giving loans by the banks in the form of derivative deposits leads to money creation while the repayment of loans by the borrowers results in destruction of money.

Modern banks create deposits in two ways-

a. Passive deposits or Primary deposits

b. Derivative deposits or Active deposits.

Primary deposits- Are deposits when a customer opens an account and bring in his cash and cheques credited in this account. Bank here merely accepts the deposits of the customer and credits in his accounts. It is these deposits that make bank further to advance loans to its customers.

These deposits do not make net addition to the stock of money in the economy. They only convert currency money in to deposit money. Primary deposits are the sources of funds for the commercial banks to make advances. A bank keeps a percentage of reserves known as CRR and uses the balance for making loans and advances.

Derivative or Active deposits- These deposits are created by banks by opening deposits in the name of person who comes to borrow funds from the bank. Active deposits are also created when bank purchase securities or other forms of assets from the public.

Process of credit creation- The process can be explained as follows- When a borrower is sanctioned a loan by the bank, the loan money is credited in to the borrowers deposit account. The borrower can either with draw the entire loan money at once or as and when required. Now if the borrower pays to his creditor in connection with some business transactions; a cheque is drawn upon his account with the bank. If the creditor deposits that cheque in another bank in his account, now another bank receives the primary deposits in the form of a cheque drawn upon the first account.

This second bank keeps some CRR, and then derives a derivative deposit by advancing a loan to some borrower. The second borrower may also make the payment out of his account to another account creditor who happens to have a deposit in the form of cheque drawn on the second bank. This is how the process gets repeated until the total volume of derivative deposits created by all the banks would be a multiple of the initial amount created by the first bank.

The process of multiple credit expansion can be explained as follows---

Let's create a deposit of Rs 2000/ with bank A. the balance sheet of Bank A will be as follows-

Bank A

Liabilities	**Assets**
Primary Deposits - Rs 2000/	**Cash Rs 2000/**
	Minimum cash reserve required - Rs. 200/
	Excess reserves Rs 1,800/

As a minimum cash reserve ratio is 10%, the bank will keep Rs 200/ as CRR and create derivative deposit of Rs 1800/. This excess reserve fund of Rs 1800/ is used for giving loans and advances to its customers.

The new balance sheet would be as follows-

Bank A

Liabilities	**Assets**
Primary Deposits - Rs 2000/	**Cash Rs 2000/**
Derivative deposit Rs 1800/	**Loans Rs 1800**

Bank has given a loan of 1800/ to Mr. A and in repayment of some obligation may give a cheque of Rs 1800/ to Mr. B and he may deposit in his account in Bank B. Now Rs 1800/ is the primary deposit of Bank B.

The balance sheet of Bank B would be as follows-

Bank B

Liabilities	Assets
Primary Deposits - Rs 1800/	**Cash Rs 1800/**
	Minimum cash reserve required - Rs. 180/
	Excess reserves Rs 1,620/

The deposit liability of the bank is Rs 1800/ and cash reserve of 1620/. The bank can now expand its lending activity to the extent of Rs1620/.if the bank B is able to advance 1620/ as loans then the balance of sheet would be as ---

Bank B

Liabilities	Assets
Primary Deposits - Rs 1800/	**Cash Rs 1800/**
Derivative deposit Rs 1620/	**Loans Rs 1620**

If the borrower pays this amount to anyone else in the form of cheque and that person deposits in Bank C, then liabilities of Bank C would Rs 1620/. The balance sheet would be-

Bank C

Liabilities	Assets
Primary Deposits - Rs 1620/	**Cash Rs 1620/**
	Minimum cash reserve required - Rs. 162/
	Excess reserves Rs 1,458/

In this way the process of multiple credit creation takes place, with every time the liabilities of commercial banks will increase but at a diminishing rate.

The following table will depict the picture of multiple credit expansion of commercial bank.

Bank	Liabilities	Cash reserves	Loans
Bank A	2000	200	1800
Bank B	1800	180	1620
Bank C	1620	162	1458
Bank D	1458	145	1313
Bank E	1313	131	1182
	20,000	2000	18000

Thus this process will create an initial primary deposit of Rs 2000 into Rs 18,000 derivative deposit. It shows an almost 10 times increase in the derivative deposits on the basis of original reserves. The above process of credit creation will end when the bank is left with no excess cash reserves. The 10 times in the derivative deposits increase is known as credit multiplier. The credit multiplier is defined as the ratio between the ultimate amount of derivative deposits created and the original amount of excess reserves in the banking system.

Total Credit Creation = Original Deposit * Credit Multiplier Coefficient

The credit / deposit multiplier is $k=1/r$,

Where– k stands for credit multiplier and

r stands for cash reserve ratio.

Thus credit multiplier is the reciprocal of CRR. If CRR is 20% then

k=1/r = 1/.2 =5 (1/20/100 =1*100/20 = .5)

The higher CRR, lower will be the credit multiplier. The credit multiplier is derived by dividing the total volume of derivative deposits by the original excess cash reserves.

$$\text{Credit multiplier} = \frac{\text{Volume of derivative deposits}}{\text{Original excess cash reserves}}$$

$$\frac{18{,}000}{1800} = 10$$

Thus the size of credit multiplier is 10. The size of credit multiplier depends on the size of CRR, this was the process where we just checked with 1 commercial bank, and then if entire commercial banks are taken together the total value of credit creation will be enormous. It should be remembered that the credit multiplier operates in both the direction, forward as well as backward. When a bank receives an additional amount of cash as primary deposit, it results in expansion of credit. When it losses certain amount of cash, it leads to multiple contraction of credit.

Whether the system is operating with single bank or with many banks, the banking system as a whole will not lose any cash. The banking system as a whole can create an amount of derivative deposit which is a multiple of its original excess reserves, depending upon the cash reserves observed by the bank.

It operates like this- a single operating bank can create a derivative deposit which is multiple of its original reserves. But where there is multiple banking system, along with other banks cannot create a derivative deposit more than its original excess reserves.

Credit multiplier has a great practical significance. If it knows the magnitude of the credit multiplier, it can estimate the exact effect on the volume of credit on an initial increase or decrease in the cash reserves of the commercial bank. The credit multiplier is based on the following assumptions-

a. CRR remains constant throughout all the stages of credit creation process.

b. Bank maintains a fixed relationship between their deposit liabilities and cash reserves.

c. There is no cash drain and the excess reserves are turned into derivative deposits through granting loans. Thus derivative deposits become primary deposit with other banks.

d. It is applicable where there is well developed banking system and people have banking habits.

e. The central bank does not adopt any credit control policy.

f. There exists normal business conditions in the country; the reciprocal of the required CRR gives the maximum credit multiplier.

Limitations on the powers of banks to create credit

1. Volume of currency in circulation-

Credit creation by commercial bank depends upon the cash received by public in the form of primary deposits. Higher the primary deposits, larger would be the derivative deposits. Volume of primary deposits depends upon the actual volume of currency in circulation. Higher the volume of primary deposits, higher would be the ability of commercial banks to create credit. Thus the amount of currency in circulation constitutes a real limitation on the ability of the banks to create credit.

2. Cash reserve ratio.

Credit creation is dependent on CRR. Higher the CRR, smaller would be the excess reserves available and smaller the CRR, excess would be the reserves with the bank and higher the volume of credit creation by the banks.

3. External drain

With every withdrawal of cash by the public, the excess reserves of the bank are automatically reduced. This reduces the bank‘s reserves and reduces the power of credit creation and is called as external drain.

4. Banking habits of the public

Power of credit creation by bank is limited by the banking habits of the people. Higher the cash transactions by the public lower the ability of the bank for credit creation.

5. Bank's reserves with the central bank

With every rise in the percentage of central bank's reserves, the volume of commercial bank's reserve is reduced and vice versa. These reserves determine the credit creation ability of the commercial bank. This reserve serves as the first line of defence.

6. Obligation to maintain SLR

Commercial banks, including India are required to maintain second line of defence in the form of near liquid assets, like govt. securities, bonds, treasury bills and other approved securities which can be encashed easily in emergency. The higher the SLR lesser would be the lendable sources with banks and thus curtails the credit creation power of commercial banks.

7. Monetary Policy of Central bank

Central bank has the power to influence the volume of money in circulation and through this it can influence the volume of credit created by the banks. It controls and checks credit creation through its weapon like bank rate, open market operations. Thus it exercises control on the expansion and contraction of credit by the comm. banks.

8. Supply of good collateral securities.

It is also one of the limitations of power to a commercial bank for credit creation. Every loan is backed by security, like stocks, shares, bill markets, bonds etc. Availability of good collateral securities determines expansion and contraction of credit.

9. Condition of trade and business

Prosperity period is marked by more profitable investments and greater demand for credit, and is marked by expansion of credit. Periods of depression is marked by contraction of credit creation.

10. Cash Transactions

Higher the cash transactions lower would be the ability of credit creation.

UNIT-III: Central Banking

A central bank is an independent national authority that conducts monetary policy, regulates banks, and provides financial services including economic research. Its goals are to stabilize the nation's currency, keep unemployment low and prevent inflation.The central bank is an apex institution of the monetary system which seeks to regulate the functioning of the commercial banks of a country.

History of Central Banks-

The modern central banks were the Bank of England and the Swedish Riks bank, which date back to 1694 in the 17th century. The Bank of England was the first to acknowledge the role of lender of last resort. European central banks made it easier for governments to grow. The National Banking Act of 1863 created a network of national banks and a single U.S. currency, with New York as the central reserve city.

The United States subsequently experienced a series of bank panics in 1873, 1884, 1893 and 1907. In response, the United States established the Federal Reserve System and established 12 regional Federal Reserve Banks throughout the country to stabilize financial activity and banking operations.

Definitions-

R.S. Sayers 'the business of a central bank as distinguished from a commercial bank is to control the commercial banks in such a way as to promote the general monetary policy of the state'.

Samuelson – A central bank is a bank of bankers. Its duty is to control the monetary base….and through control of 'high powered money' to control the community's supply of money.

Thus central bank can be defined as 'the apex banking and the monetary institution whose main function is to control, regulate and stabilize the banking and the monetary system of the country in the national interests.'

Functions-

1. Monopoly of note issue.

The central bank is the bank of issue. It has the monopoly of note issue. Notes issued by central bank circulate as legal tender money. Coins are manufactured in the government mint but they are put into circulation through the central bank.

The central bank in the process of note issue is required by law to keep a certain amount of gold and foreign securities against the issue of notes. The monopoly of issuing notes vested in the central bank ensures uniformity in the notes issued which helps in facilitating exchange and trade within the country. It brings stability in the monetary system and creates confidence among the public. The central bank can restrict or expand the supply of cash according to the requirements of the economy. Thus it provides elasticity to the monetary system.

2. Banker, Agent and Adviser to the government.

Central banks everywhere act as bankers, fiscal agents and advisers to their respective governments. As banker to the government, the central bank keeps the deposits of the central and state governments and various departments; it makes payments on behalf of governments. But it does not pay interest on governments deposits. It buys and sells foreign currencies on behalf of the government.

The central bank, as an agent, makes short-term loans to the government for a period not exceeding 90 days. It floats loans, pays interest on them, and finally repays them on behalf of the government. Thus it manages the entire public debt.

The central bank as an Adviser, advises the government on economic and money matters as controlling inflation or deflation, devaluation or revaluation of the currency, deficit financing, balance of payments etc

3. Acts as a Banker's bank.

As a banker it acts in three capacities-

1. Custodian of cash reserves of the commercial banks. Commercial banks are required by law to keep reserves equal to a certain percentage of both time and demand deposits liabilities with the central banks. It is on the basis of these reserves that the

central bank transfers funds from one bank to another to facilitate the clearing of cheques. The central bank acts as the custodian of the cash reserves of commercial banks and helps in facilitating their transactions.

2. Lender of the Last Resort-

De Kock regards it as a function as a sine qua non of central banking. By granting accommodation in the form of re-discounts and collateral advances to commercial banks, bill brokers and dealers, or other financial institutions, the central bank acts as the lender of the last resort. The central bank lends to institutions to help them in times of stress so as to save the financial structure of the country from collapse. It acts as lender of the last resort through discount house on the basis of treasury bills, government securities and bonds at "the front door". It also makes temporary accommodation to the commercial banks or discount houses directly through the "back door".

4. Custodian of nation's gold reserves and foreign exchange reserves.

The central bank keeps and manages the foreign exchange reserves of the country. It is an official reservoir of gold and foreign currencies. It sells gold at fixed prices to the monetary authorities of other countries. It also buys and sells foreign currencies at international prices. In consultation with the International Monetary Fund it tries to bring stability in foreign exchange rates.

5. Agency of economic growth

It not only acts as a regulatory authority but also as an agent of economic growth. It is involving itself in promotional and developmental activities, especially in UDCs and LDCs.

6. Controller of Credit and Money Supply

The important function of the central bank is to control the credit creation power of commercial bank in order to control inflationary and deflationary pressures within this economy. It adopts quantitative methods and qualitative methods. Quantitative methods aim at controlling the cost and quantity of credit by adopting bank rate policy, open market operations, and by variations in reserve ratios of commercial banks.

7. Clearing House Function

The central bank acts as a clearing house for transfer and settlement of mutual claims of commercial banks. Since the central bank holds reserves of commercial banks, it transfers funds from one bank to other banks to facilitate clearing of cheques. This is done by making transfer entries in their accounts on the principle of book-keeping. To transfer and settle claims of one bank upon others, the central bank operates a separate department in big cities and trade centers. This department is known as the "clearing house" and it renders the service free to commercial banks.

8. Collection and Publication of Data.

The central bank also publishes periodical reports relating to different aspects of monetary and economic policies for the benefit of banks and the public; and to engage in research and train banking personnel etc.

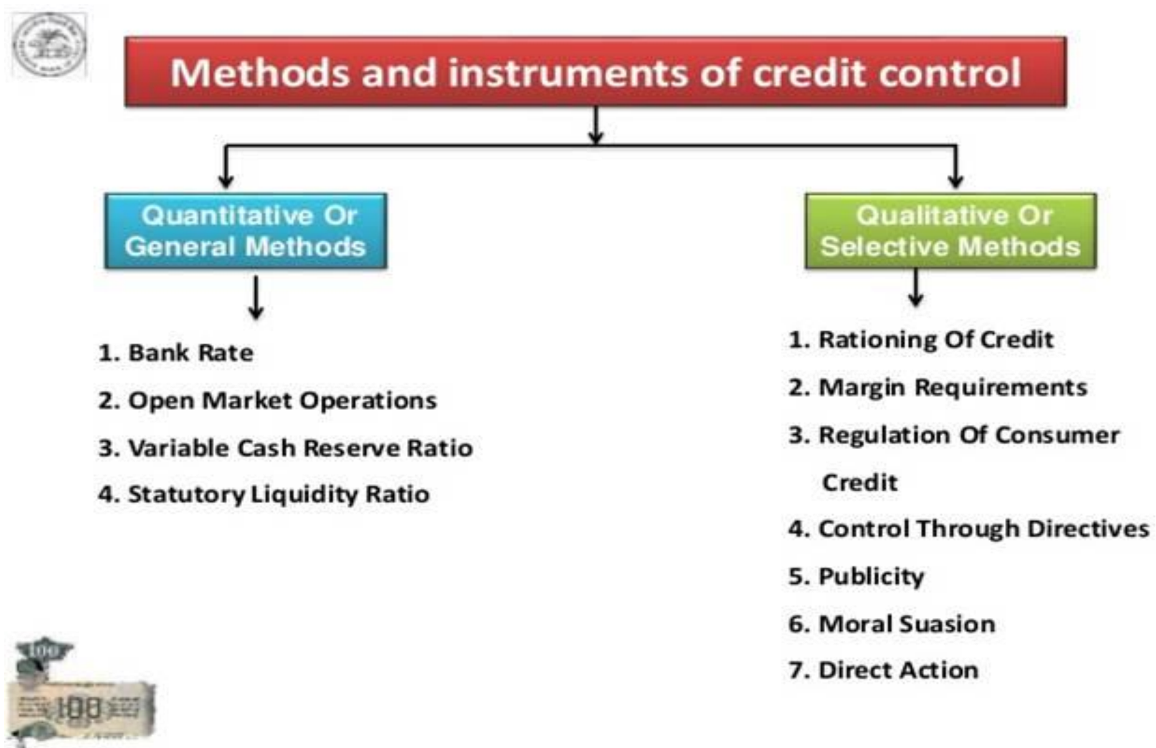
The central banks in number of developing countries have been entrusted with the responsibility of developing a strong banking system to meet the expanding requirements of agriculture, industry, trade and commerce.

Accordingly, the central banks possess some additional powers of supervision and control over the commercial banks. They are the issuing of licenses; the regulation of branch expansion; to see that every bank maintains the minimum paid up capital and reserves as provided by law; inspecting or auditing the accounts of banks; to approve the appointment of chairman and directors of such banks in accordance with the rules and qualifications; to control and recommend merger of weak banks in order to avoid their failures and to protect the interest of depositors; to recommend nationalization of certain banks to the government in public interest

Methods of Credit control

Control of credit is essential for stability and orderly growth of an economy. There are two types of credit controls used by the central banks in modern time for regulating bank advances. According to A.C.L. Day, a central bank is "to help control and stabilise the monetary and banking system."

A central bank is "a bank which constitutes the apex of the monetary and banking structure of its country and which performs as best as it can in the national economic interest. Thus its responsibility is to maintain the financial sovereignty and economic stability of a country. It controls the finance of the country through two methods of credit control, namely, Quantitative or General Control and Qualitative or Selective Credit Controls



Quantitative or General Control:

1. Bank Rate or Discount Rate Policy-

The bank rate policy is the principal method of general credit control, was used by the central bank of England till I world war. The bank rate or the discount rate is the rate

fixed by the central bank at which it rediscounts first class bills of exchange and government securities held by the commercial banks.

The bank rate is the interest rate charged by the central bank at which it provides rediscount to banks through the discount window. The central bank controls credit by making variations in the bank rate.

To expand credit, the central bank lowers the bank rate. Borrowing from the central bank becomes cheap and easy. So the commercial banks will borrow more. They will, in turn, advance loans to customers at a lower rate. The market rate of interest will be reduced.

The bank rate policy seeks to influence both the cost and availability of credit to members of the bank. Cost, of course, is determined by the discount rate charged, and the availability depends largely upon the statutory requirements of eligibility of bills for discounting and advances, as also the maximum period for which the credit is available.

The bank rate obviously is distinct from the market rate. The former is the rate of discount of the central bank, while the latter is the lending rate charged in the money market by the ordinary financial institutions. Bank rate policy involves the variation of discount rates to influence the market rate of interest, which plays a crucial rate in the creation credit.

Conditions for the bank rate policy-

1. Maintenance of close relationship between bank rate and other interest rate.

2. Prevalence of elastic economic structure.

3. Existence of Short term money markets.

Objectives of bank rate policy-

1. Controlling the volume of credit in the economy.

2. Restoring the equilibrium between savings and investments.

3. Correcting the disequilibrium in the BOP and

4. Maintaining the exchange rate stability.

Limitations-

1. There is a lack of conditions for a successful implementation of bank rate policy.
2. There is no son sensitivity to interest rate changes.
3. Not effective in controlling deflation.
4. There exits conflict between the internal and external effects of the bank rate policy.
5. Increasing non-dependence of commercial bank on central banks for financial assistance.
6. It has not been successful in controlling the BOP disequilibrium.
7. It is impersonal nature of bank rate policy.

Decline in the utility of Bank rate policy-

1. It is mainly due to lack of elasticity in economic structure.
2. There has been an increase in the liquidity assets of commercial banks.
3. There has been decline in the importance of bills of exchange as a credit instrument.
4. The rise in the other methods of credit control.
5. The interest rates are less sensitive to an increase in interest rates.
6. The change in modes of business financing.
7. Increasing importance of Fiscal policy.

2. Open market operations-

This credit control measure emerged post 1st world war. refers to the buying and selling of government securities in the open market in order to expand or contract the amount of money in the banking system.

Open market operations are a measure used by the central bank of the country to manage money supply. Through OMOs, central bank either purchase or sell

government bonds in the open market. The primary tool for implementing monetary policy, OMOs facilitate changes in short-term interest rates and money supply depending on the prevailing economic scenario.

If the liquidity condition of the economy is weak, the central bank purchases government securities and hence infuses money into the system. Otherwise, it sells securities in case of excess liquidity in the system. The central bank performs open market operations considering the targets for various economic parameters such as interest rates, exchange rates or inflation.

The success of OMO was mainly due to following reasons -it is a direct credit control measure and has immediate effect and success of OMO has been only after the emergence of strong money market.

Objectives –

1. To eliminate the effects of exports and imports of gold under the gold standard,

2. To impose check on the export of capital.

3. To remove shortage of money in the money market.

4. To support bank rate policy.

5. To check the 'Run on the Bank'.

Conditions for OMO

1. Prevalence of well developed securities market- a country should posses well developed and well organised market for different types of securities for central bank to use it in the market.

2. Maintenance of a definite CRR by commercial bank- the purchase and sale of securitie by central bank to chck the cash reserves of commercial banks can be successful only when commercial banks posses definite cash reserve ratio.

3. Non cooperation of extraneous factors- impact of unfavourable balance of payments, hoarding, and change in the velocity of circulation of money will not be supportive for the functioning of OMO.

4. Non conformist attitude of the borrowers- the behaviour of the borrowers and attitude towards the commercilbanks with respect borrowings will not support OMO at times.
5. Existence of adequate stock of securities with the central bank- omo is successful only when the purchase and sale of securities is carried on in extensive scale. Thus there should be a possession of large types of securities for OMO to function effectively.
6. Non existence of direct access of commercial banks to the central bank- if the commercial banks have direct acces to central bank then, OMO will notbe effective.
7. OMO is more helpful for credit contraction than expansion

3. *Variable Cash Reserve Ratio*

This method was first adopted by the Federal Reserve System of the U.S.A. in 1935 in order to prevent injurious credit expansion or contraction. 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 which is 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.

This activity of the Central Bank will force the Commercial Banks to curtail the creation of credit in the economy. In this way by raising the cash reserve ratio of the Commercial Banks the Central Bank will be able to put an effective check on the inflationary expansion of credit in the economy.

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 country. The Central Bank will lower down the Cash Reserve ratio with a view to expand the cash reserves of the Commercial Banks.

With this, the Commercial Banks will now be in a position to create more credit than what they were doing before. Thus, by varying the cash reserve ratio, the Central Bank can influence the creation of credit.

India along with cash reserve ratio also has in place Statutory Liquidity ratio to control the reserves with commercial bank. Banking regulation act 1962 has made provision for a minimum of statutory liquidity ratio (SLR) of 25% of the banks against their net demand and time liabilities.

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 important methods of credit control under selective method:

1. Rationing of Credit:

Under this method the credit is rationed by limiting the amount available to each applicant. The Central Bank puts restrictions on demands for accommodations made upon it during times of monetary stringency.

In this the Central Bank discourages the granting of loans to stock exchanges by refusing to re-discount the papers of the bank which have extended liberal loans to the speculators. This is an important method of credit control and this policy has been adopted by a number of countries like Russia and Germany.

2. Direct Action:

When the Commercial Banks does not follow the policy of the Central Bank, then the Central Bank has the only recourse is direct action. This method can be used to enforce both quantitatively and qualitatively credit controls by the Central Banks. This method is not used in isolation; it is used as a supplement to other methods of credit control.

Direct action may take the form either of a refusal on the part of the Central Bank to re-discount for banks whose credit policy is regarded as being inconsistent with the maintenance of sound credit conditions. Even then the Commercial Banks do not fall in line, the Central Bank has the constitutional power to order for their closure.This method can be successful only when the Central Bank is powerful enough and has cordial relations with the Commercial Banks. Mostly such circumstances are rare when the Central Bank is forced to resist to such measures.

3. Moral Persuasion:

This method is frequently adopted by the Central Bank to exercise control over the Commercial Banks. Under this method Central Bank gives advice, then request and persuasion to the Commercial Banks to co-operate with the Central Bank is implementing its credit policies.If the Commercial Banks do not follow or do not abide by the advice or request of the Central Bank no gross action is taken against them. The Central Bank merely was its moral influence and pressure with the Commercial Banks to prevail upon them to accept and follow the policies. .

4. Method of Publicity:

In modern times, 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. Its officials through news-papers, journals, conferences and seminar's present a correct picture of the economic conditions of the country before the public and give a prospective economic policies. In developed countries Commercial Banks automatically change their credit creation policy. But in developing countries, commercial Banks are being lured for regional gains. Even the Reserve Bank of India follows this policy.

5. Regulation of Consumer's Credit:

Under this method consumers are given credit in a little quantity and this period is fixed for 18 months; consequently credit creation expanded within the limit. This method was originally adopted by the U.S.A. as a protective and defensive measure, there after it has been used and adopted by various other countries.

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.

Objectives of Monetary Policy

The monetary policy refers to a regulatory policy whereby the central bank maintains its control over the supply of money for the realization of general economic goal. Monetary policy may be defined as the use of money supply by the appropriate authority to achieve certain economic goals.

H.G Johnson defines monetary policy as a "policy employing the Central bank's control of the supply of money as an instrument for achieving the objectives of general economic policies."

Thus monetary policy refers to measures designed to affect the supply, cost and availability of money to ensure a more efficient operation of the economic system. It involves deliberate manipulation of monetary instruments for the realization of objectives of economic policy.

The primary objective of central banks is to manage inflation. The second is to reduce unemployment, but only after they have controlled inflation. The U.S. Federal Reserve, like many other central banks, has specific targets for these objectives. It seeks an unemployment rate below 6.5 percent. It wants the core inflation rate to be between 2 percent and 2.5 percent. It seeks healthy economic growth. That's a 2 to 3 percent annual increase in the nation's gross domestic product.

General objectives of monetary policy

In the process of framing a monetary policy every government keeps in certain objectives considering the economic situation of that country. These objectives are chosen by the monetary authority based on the needs and priorities of a country's economic situation. They later change in accordance with the change in the economic scenario of a country over the years. Different countries adopt different objectives in their monetary policy based on the countries requirements.

The general objectives of monetary policy are-

1. Neutrality of money-

It is to regulate the real variables in such a way that it is unaffected, can be achieved by maintaining consistency in supply of money. Economist such as Wicksted, Robertson has always considered money as a passive factor. According

to them, money should play only a role of medium of exchange and not more than that. Therefore, the monetary policy should regulate the supply of money. The change in money supply creates monetary disequilibrium. Thus monetary policy has to regulate the supply of money and neutralize the effect of money expansion.

2. Price stability

Price fluctuations of a larger degree are always unwelcome. Sustained increase in price level has a destabilizing effect on the economy. A falling price level has more destabilizing influence on the economy. In other words, both inflation and depression must be controlled so that benefits of economic development are reaped. Price stability prevents not only economic fluctuations but also helps in the attainment of a steady growth of an economy. Monetary policy also has the objective of upholding external stability in prices. External instability hampers the smooth flow of trade between nations. It also erodes the confidence of the currency. Thus, what is needed is a stable exchange rate.

3. Exchange stability

Exchange rate is the price of a home currency expressed in terms of any foreign currency. If this exchange rate is very volatile leading to frequent ups and downs in the exchange rate, the international community might lose confidence in our economy. The monetary policy aims at maintaining the relative stability in the exchange rate.

4. Economic growth

Economic growth is the most important objective of a monetary policy. The monetary policy can influence economic growth by controlling real interest rate and its resultant impact on the investment. An appropriate monetary policy by adjusting money supply to the needs of growth, directing the flow of funds in keeping with the overall economic priorities, and providing institutional facilities for credit in specific areas of economic activity, all combined creates a favourable climate for economic growth.

Economic growth is conditioned by the productive capacity or capital stock of the economy. Economic growth requires an increase in saving and investment. Monetary policy can contribute towards economic growth by raising saving-income ratio. Monetary policy can boost aggregate saving rate by expanding banking facilities

in under banked and unbanked areas. Commercial banks can mobilize savings of the people in such a way that savings are channelized into productive investment. To increase productive investment, bank funds are invested in government securities so that the government can finance its planned investment programme. Banks also provide a great deal of monetary fund's to meet the credit needs of various economic sectors of the economy.

Bank funds are invested in government securities that help the government to finance its planned investment programme. Banks also provide a great deal of monetary fund's to meet the credit needs of various economic sectors of the economy. Along with generation of savings and diverting savings for investment alone cannot boost economic growth. Thus the need is for the proper allocation of funds in right direction. Monetary policy has to be designed in such a way that scarce resources are invested only in productive lines. Monetary policy contributes greatly in pushing the growth rate of the economy by raising both saving-income ratio and investment-income ratio.

4. Full employment

Monetary policy can be used for achieving full employment. If the monetary policy is expansionary then credit supply can be encouraged. It could help in creating more jobs in different sector of the economy. It is difficult to give a precise definition of full employment, monetary policy during the 1930s aimed at achieving and maintaining full employment. Full employment, though theoretically conceivable, is difficult to attain in market driven economies. A country must aim at attaining at least near full employment situation.

Fiscal Objectives:

Most important fiscal objective which monetary policy has to pursue is that of facilitating government borrowing and the management of public debt. In the interest of a sound debt management policy, monetary policy is employed so that an orderly condition in the security market is established.

Equal Income Distribution: In recent years economists have given the opinion that the monetary policy can help and play a supplementary role in attainting an economic equality. Monetary policy can make special provisions for the neglect supply such as

agriculture, small-scale industries, village industries, etc. and provide them with cheaper credit for longer term. This can prove fruitful for these sectors to come up. Thus in recent period, monetary policy can help in reducing economic inequalities among different sections of society.

UNIT-IV: International Trade

Importance of International trade

Trade involves the transfer of the ownership of goods or services from one person or entity to another in exchange for other goods or services or for money. Possible synonyms of "trade" include "commerce" and "financial transaction". A network that allows trade is called a market.

The original form of trade, barter, saw the direct exchange of goods and services for other goods and services. Barter is trading things without the use of money Modern traders generally negotiates through a medium of exchange, such as money. As a result, buying can be separated from selling, or earning. The invention of money greatly simplified and promoted trade. Trade between two traders is called bilateral trade, while trade between more than two traders is called multilateral trade.

Trade exists due to the specialization and division of labor, in which most people concentrate on a small aspect of production, trading for other products. Trade exists between regions because different regions may have a comparative advantage in the production of some trade able commodity, or because different regions' size may encourage mass production. As such, trade at market prices between locations can benefit both locations.

Foreign trade is trade between the different countries of the world. It is also called as International trade, External trade or Inter-Regional trade. It consists of imports, exports and entrepot. The inflow of goods in a country is called import trade whereas outflow of goods from a country is called export trade. Many times goods are imported for the purpose of re-export after some processing operations. This is called entrepot trade. Foreign trade basically takes place for mutual satisfaction of wants and utilities of resources.

Importance of Foreign Trade

The importance of foreign trade is as follows-

1. Division of labour and specialisation

Foreign trade leads to division of labour and specialisation at the world level. Some countries have abundant natural resources. They should export raw materials and import finished goods from countries which are advanced in skilled manpower. This gives benefits to all the countries and thereby leading to division of labour and specialisation.

2. Optimum allocation and utilisation of resources

Due to specialisation, unproductive lines can be eliminated and wastage of resources avoided. In other words, resources are channelized for the production of only those goods which would give highest returns. Thus there is rational allocation and utilization of resources at the international level due to foreign trade.

3. Equality of prices

Prices can be stabilised by foreign trade. It helps to keep the demand and supply position stable, which in turn stabilises the prices, making allowances for transport and other marketing expenses.

4. Availability of multiple choices

Foreign trade is highly competitive. To maintain and increase the demand for goods, the exporting countries have to keep up the quality of goods. Thus quality and standardised goods are produced.

5. Raises standard of living of the people

Imports can facilitate standard of living of the people. This is because people can have a choice of new and better varieties of goods and services. By consuming new and better varieties of goods, people can improve their standard of living.

6. Generate employment opportunities

Foreign trade helps in generating employment opportunities, by increasing the mobility of labour and resources. It generates direct employment in import sector and indirect employment in other sector of the economy. Such as Industry, Service Sector (insurance, banking, transport, communication), etc.

7. Facilitate economic development

Imports facilitate economic development of a nation. This is because with the import of capital goods and technology, a country can generate growth in all sectors of the economy, i.e. agriculture, industry and service sector.

8. Assistance during natural calamities

During natural calamities such as earthquakes, floods, famines, etc., the affected countries face the problem of shortage of essential goods. Foreign trade enables a country to import food grains and medicines from other countries to help the affected people.

9. Maintains balance of payment position

Every country has to maintain its balance of payment position. Since, every country has to import, which results in outflow of foreign exchange, it also deals in export for the inflow of foreign exchange.

10. Brings reputation and helps earn goodwill

A country which is involved in exports earns goodwill in the international market. For e.g. Japan has earned a lot of goodwill in foreign markets due to its exports of quality electronic goods.

11. Promotes World Peace

Foreign trade brings countries closer. It facilitates transfer of technology and other assistance from developed countries to developing countries. It brings different countries closer due to economic relations arising out of trade agreements. Thus,

foreign trade creates a friendly atmosphere for avoiding wars and conflicts. It promotes world peace as such countries try to maintain friendly relations among themselves.

Theories of International Trade- Comparative Cost Theory

The theory for international trade tells the benefits of exchange of commodities, technology, human resource and every exchangeable item or skill for return. International trade between the countries is growing rapidly as world trade is the most outstanding factor for the economic growth of a country

Economists have developed theories to explain the mechanisms of global trade. The main historical theories are called classical and are from the perspective of a country, or country based. By the mid-twentieth century, the theories began to shift to explain trade from a firm, rather than a country, perspective. These theories are referred to as modern and are firm based or company-based.

Classical Trade Theories

In classical theory of international trade, a country is changing its economy to open economy which means trade is allowed by the government. Moving from close economy to free trade economy gives the benefits to the countries in term of economic gains and resource allocations. It helps the production units to adopt new technologies, skills which lead them to high production.

Mercantilism led to evolution of trade which turned the local economies to national economies and local trade to international trade. It was the system followed by the major developed countries during the 16th century. Mercantilism policies were creating hurdles for economic progress of countries. In 1776, Adam Smith questioned the leading mercantile theory of the time in *The Wealth of Nations*. Adam Smith, *an Inquiry into the Nature and Causes of the Wealth of Nations.* To overcome mercantilism trade theory, Adam smith, the father of economics, gave a new concept for trade, known as Theory of **Absolute advantage**, which focused on the ability of a country to produce a good more efficiently than another nation.

Smith opined that trade between countries shouldn't be regulated or restricted by government policy or intervention. He stated that trade should flow naturally according to market forces. The theory of absolute advantage stated that a country should specialize in those products, which it can produce efficiently. This theory assumes that there is only one factor of production that is labour. Specialization and division of labour were given

importance for increasing productivity. The extent of specialization and division of labour was dependent upon the size of the market; a larger market would encourage a greater degree of specialization and division of labour.

The classical economists were mainly concerned with two questions-

First, in the process of production, what product a country should specialize or which goods a country should export and which it will import.

Second, once different countries produce different goods; what will be the ratio of exchange between goods?

It was argued that each country should specialize in the production of those goods for which it can produce at low cost. Thus, Adam Smith wrote in his Wealth of Nations that- "If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage".

Trade would be beneficial for both the countries, if country A exports the goods, which it can produce with lower cost than country B and import the goods, which country B can produce with lower cost than it.

The classical theory of trade is based on the labour cost theory of value. This theory states that goods are exchanged against one another according to the relative amounts of labour embodied in them in the process of production.

Assumptions-

1. Trade is between two countries.

2. Only two commodities are traded.

3. Free trade exists between two countries.

4. Cost of production is determined by labour utilisation.

This theory can be explained with an example. There are two countries- Country A and Country B. These countries have absolute cost advantages in producing commodity X and commodity Y.

The absolute cost differences can be seen in the given table

Country	**Commodity X**	**Commodity Y**
A	**10**	**5**
B	**5**	**10**

The table depicts that –

Country A can produce 10 X or 5Y with given 2 units of labour.

Country B can produce 5X and 10 Y with given 2 units of labour.

Thus, it showcases that Country A has absolute advantage of producing Commodity X, while Country B has absolute advantage in the production of Commodity Y.

$$\frac{10X \text{ of } A}{5X \text{ of } B} > 1 > \frac{5Y \text{ of } A}{10Y \text{ of } B}$$

Thus, trade between the countries could be beneficial only when Country A will specialise in commodity X and country B in commodity Y. Hence gains from trade will be as follows-

	Production before Trade		**Production after trade**		**Gains from trade**	
	X	**Y**	**X**	**Y**	**X**	**Y**
A	**10**	**5**	**20**	**-**	**+10**	**-5**
B	**5**	**10**	**-**	**20**	**-5**	**+10**
Total production	**15**	**15**	**20**	**20**	**+5**	**+5**

If both the countries go for trade, specialise in production of the commodity that has absolute cost advantage, and then both the countries will gain from the trade.

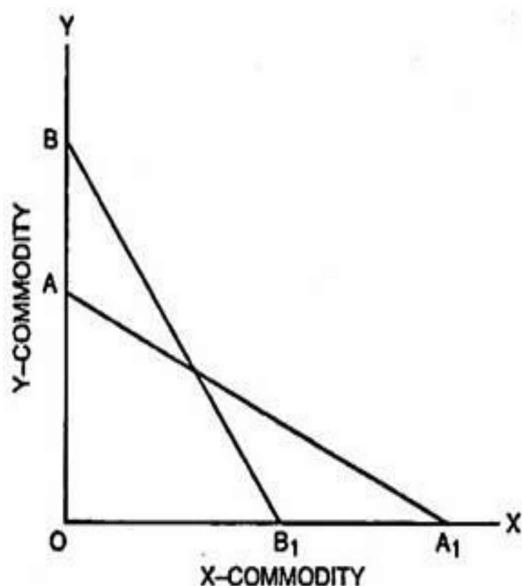


Fig. 2.1

AA_1 is the production possibility curve of country A. Given the techniques and factor endowments, if all the resources are employed in the production of X commodity, it can produce OA_1 quantity of X. On the contrary, if all resources are used in the production of Y, country A can produce OA quantity of Y. BB_1 is the production possibility curve of country B. If all resources are employed in the production of X commodity, OB_1 quantity can be produced. Alternatively, if all the resources are used in the production of Y, it is possible to produce OB quantity of Y.

The slope of production possibility curve is measured by the ratio of labour productivity in X to labour productivity in Y in each country. Since slope of AA_1 is less than the slope of BB_1, it signifies that country A has absolute cost advantage in the production of X commodity, while country B has the absolute cost advantage in the production of Y commodity. Adam Smith also emphasized that specialisation on the basis of absolute cost advantage would lead to maximization of world production.

Smith's analysis of trade has been his 'Vent for Surplus' doctrine. According to him, the surplus of production in a country over what can be absorbed in the domestic market can be disposed of in the foreign markets. The 'Vent for Surplus' doctrine implies that the international specialisation is not reversible and that it is an integral part of the development process in any country. In addition, this doctrine implies that the foreign trade results in the fullest utilization of the idle productive capacity that is likely to exist in the absence of trade.

Criticisms

1. This theory assumes that each exporting country has an absolute cast advantage in the production of a specific commodity. This assumption may not hold true, when a country has no specific line of production in which it has an absolute superiority.

2. Adam Smith simply indicated the fundamental basis on which international trade rests. The absolute cost advantage had failed to explore in any comprehensive manner the factors influencing trade between two or more countries.

3. The 'Vent for Surplus' doctrine of Adam Smith is not completely satisfactory. This doctrine can have serious adverse repercussions on the growth process of the backward countries.

Comparative Cost Theory by David Ricardo

Absolute advantage was refined and developed by David Ricardo in 1817. Ricardo developed the theory of international trade based on what is known as the Principle of Comparative Advantage (Cost). International trade involves the extension of the principle of specialisation or division labour to the sphere of international exchange.

David Ricardo believed that the international trade is governed by the comparative cost advantage rather than the absolute cost advantage. A country will specialise in that line of production in which it has a greater relative or comparative advantage in costs than other countries and will depend upon imports from abroad of all such commodities in which it has relative cost disadvantage.

The principle of comparative cost states that

(a) international trade takes place between two countries when the ratios of comparative cost of producing goods differ, and

(b) Each country would specialise in producing that commodity in which it has a comparative advantage.

Production costs differ from country to country due to differences in climate, natural resources, geographical situation and efficiency of labour; based on these factors a country can produce one commodity at a less cost than the other country. Thus each

country can specialise in the production of that commodity for which it has comparative cost advantage.

Assumptions-

1. Trade takes place between two countries only.
2. There are only two commodities to be exchanged between the two countries.
3. Production function is homogeneous of the first degree. It implies that output changes exactly in the same ratio in which the factor inputs are varied. In other words, production is governed by constant returns to scale.
4. Labour is the only factor of production and the cost of producing a commodity is expressed in labour units.
5. Labour is perfectly mobile within the country but perfectly immobile among different countries.
6. Transport costs are absent so that production cost, measured in terms of labour input alone, determines the cost of producing a given commodity.
7. Money is non-existent and prices of different goods are measured by their real cost of production.
8. There is full employment of resources in both the countries.
9. Taste and preferences are similar in both countries.
10. Trade between two countries takes place on the basis of barter.
11. There are static conditions in the economy. It implies that factors supplies, techniques of production are given and constant.
12. Perfect competition exists both in the commodity and factor markets.

This model is known as two-country, two-commodity model. Ricardo's argument was about the position of a country, whether it was able to produce every commodity at an absolutely lower real cost than another country. He suggested that in such case each country should specialise in the production of those gods where its comparative advantage was greatest. This can be explained by using the division of labour as an

example. Ricardo developed his theory by comparing two countries, England and Portugal, and two commodities, wine and cloth.

Table 1 : Comparative Advantage		
Country	Amount of labour (man-hours) required to produce 1 unit	
	Wine	Cloth
Portugal	80	90
England	120	100

Ricardo developed his theory by comparing two countries, England and Portugal, and two commodities, wine and cloth.

In Portugal, a unit of wine costs 80 and a unit of cloth 90 hours of labour; and in England a unit of wine costs 120 hours and a unit of cloth 100 hours of labour. In the above example, Portugal has an absolute superiority in both branches of production. This superiority is greater in wine than in cloth.

Portugal has a comparative advantage in the production of wine, since here her cost-difference is relatively greater than in the case of cloth. The comparative ratio of the costs of production of wine in both countries is 80/120 and the ratio of the costs of production for cloth in both countries is 90/100.

Table shows that Portugal was more efficient in the production of both goods, but Ricardo argued that both countries could benefit if they specialised where their advantage was comparatively high and then traded. Portugal's labour costs were lower than England's in both cloth and wine, but the comparative advantage was greater in wine.

Portugal has a comparative advantage over England in wine relatively to cloth. Conversely, the disadvantage of England is greater in wine than in cloth. Stated in another way, England has an absolute disadvantage in cloth but at the same time she has a comparative advantage in cloth. In the absence of trade, the domestic ratio of exchange in England will be; 1 unit of wine exchanged against 1.2 units of cloth and in Portugal, 1 unit of wine exchanged against 0.88 units of cloth.

Assume that trade takes place between the two countries; it is clearly advantageous for Portugal to send wine to England where a unit of it command 1.2 units of cloth. Now Portugal will take to producing wine instead of cloth. England, on the other hand can obtain wine at much less expense by specializing upon the manufacture of cloth and exchanging the cloth with Portugal against wine.

If each country specializes upon that branch of production in which it enjoys a comparative advantage, thereby obtaining a greater total product from its given factors of production. This theory ignores factors such as transport costs and assumes that goods are homogeneous. It also ignores intra firm trade, such as that between subsidiaries of a multinational firm. Countries should specialise where their advantage is comparatively greatest and then trade.

In Ricardo's own words (referring to Portugal): "It would be advantageous for her to export wine in exchange for cloth. She would obtain more cloth from England than she could produce by diverting a portion of her capital from the cultivation of wines to the manufacture of cloth".

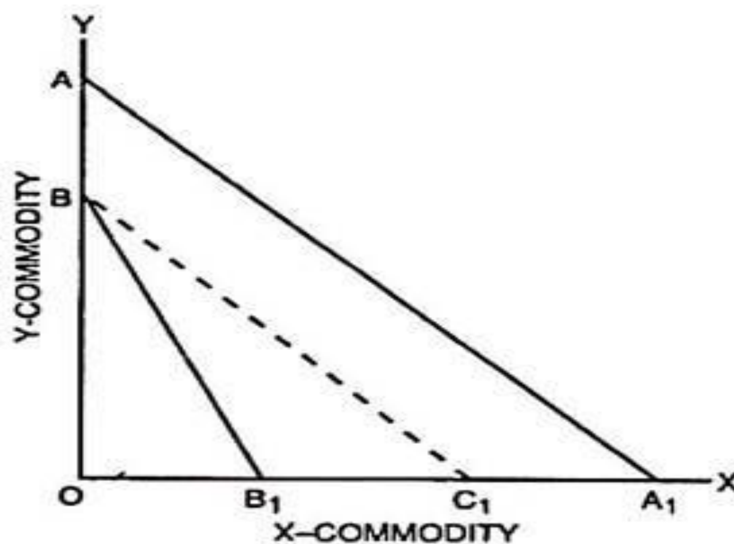


Fig. 2.2

In the diagram given, let's consider AA_1 as Production possibility curve of Portugal, and BB1 as production possibility curve of England.

Let us assume commodity X as wine, and commodity Y as cloth. Here, Portugal has an absolute advantage in the production of both the commodities. Portugal can produce OA1 of wine and OA of cloth, whereas England produces OB of cloth and

OB_1 of wine.The slope BC_1 parallel to AA_1 reveals that Portugal has comparative advantage in the production of wine, if it gives up the resources required to produce OB of cloth, it can produce OC_1 of wine of England. England had the least comparative disadvantage in production of OB of cloth, thus Portugal can export OC_1 wine and import OB of cloth from England.

Gains from Trade-

The comparative cost principle underlines the fact that two countries will stand to gain through trade so long as the cost ratios for two countries are not equal.

With trade between the two countries, England will gain by importing one unit of wine from Portugal in exchange for less than 1.2 units of cloth; Portugal will also gain if it imports one unit of cloth from England in exchange for 0.89 units of wine.

England and Portugal, if they specialise in the production of one commodity on the basis of comparative costs, they would each reallocate its factors accordingly and export that commodity in which it has comparative advantage and import that commodity in which it has a comparative disadvantage. Both countries would gain through trade and can increase the consumption of the two commodities.

Criticisms-

This theory was the basis for trade till 1st world war. Economists like Bertin Ohlin, Graham criticised this theory.

1. The theory is based on unrealistic assumption of labour cost.
2. There will never be similar tastes between the citizens of two countries.
3. The theory is based on the assumption of fixed proportion of labour which does not hold correct.
4. No firm will function under the conditions of constant returns to scale and thus it is an unrealistic assumption.
5. As the theory is derived under the conditions of perfect competiotion, it ignores transport cost, which is wrong.

6. The theory assumes that there is immobility of factors which does not hold correct as factors are mobile internally from one region to another.
7. Two country two commodity model is unrealistic as international trade is among many countries and many commodities.
8. Free trade doe not workmin practical application as it is bound by trade barriers.
9. The assumumption of full employment makes the theory static.
10. Role of technology ignored when the world trade is gained by technological advancement and innovations.
11. It is considered as one sided theory because it considers only the supply side of international trade.
12. Impossibility of complete specialisationwas criticsedby Graham.
13. Clumsy and dangerous was the opion of Prof Ohlin as the theory was unrealistic.
14. Incomplete theory as it fails to show gains from trade from distribution perspective.

Though this theory was subjective to criticisms, it has withstood testing times. It emerged again as WTO’s trade policy formulation is on the basis of this theory.

Heckscher Ohlin Trade Model

The theory was first propounded by two Swedish economists, Eli Heckscher (1919) and Bertil Ohlin. Bertin Ohlin in his work 'Inter regional and International Trade did not invalidate the classical theory but accepted the comparative advantage as the cause of international trade and then tried to examine and analysis further in a moral and logical manner.

Ohlin states that trade results on account of the different relative price of different goods in different countries. The relative price commodity difference is the result of relative costs and factor price differences in different countries. Differences in factor prices are due to differences in factor endowments in different countries. Ohlin's theory is described as the factor endowment theory or the factor proportions analysis.

This theory is based on general equilibrium analysis of price determination, and also known as General Equilibrium Theory of International Trade or Factor Endowment or Factor Proportions Theory of International Trade.

Heckscher Ohlin explained that it is differences in factor endowments of different countries and different factor proportions needed for producing different commodities that account for difference in comparative costs. This new theory is called as Heckscher-Ohlin theory of international trade.

Ohlin pointed out that differences in factor endowments of the nations and difference in factor proportions of producing different commodities accounts for differences in comparative costs and hence form the ultimate basis of inter regional or international trade.

Ohlin states that trade results on account of the different relative price of different goods in different countries. The relative price commodity difference is the result of relative costs and factor price differences in different countries.

Differences in factor prices are due to differences in factor endowments in different countries. It can contribute to the fact that trade occurs because different countries have different factor endowments. Hence, Ohlin's theory is also described as the factor endowment theory or the factor proportions analysis.

This theory is expounded in terms of a two factor model with labour and capital as the two factors of endowments. It is known as $2 \times 2 \times 2$ model (2 countries, 2 commodities, 2 factors).

Assumptions-

1. There are two countries A and B.

2. There are two factors, labour and capital.

3. There are two goods; X and Y of which X is labour intensive and Y are capital intensive.

4. Country A is labour abundant country B is capital rich.

5. There is perfect competition in both the commodity and factor markets.

6. All production functions are homogeneous of the first degree. Hence there are constant returns to the scale.

7. There are no transport costs or other impediments to trade.

8. Demand conditions are identical in both the countries

9. Taste and preferences of consumers are same in both countries.

10. Factor intensities are non reversible.

11. There is perfect mobility of labour within the region and immobile internationally.

Ohlin's thesis contends that, country exports goods which use relatively a greater proportion of its relatively abundant and thus cheap factors. It is implied that trade occurs because there are differences in relative commodity prices caused by differences in relative factor prices (thus a comparative advantage) as a result of differences in the factor endowments among the countries.

The "relative factor abundance" in the thesis has two conceptions

(a) the price criterion of relative factor abundance; and

(b) The physical criterion factor abundance.

1. Factor abundance in terms of Factor Prices-

According to the Factor prices, a country A is having capital relatively cheap and labour relatively dear is regarded as relatively capital abundant, irrespective of its ratio of total quantities of capital to labour in comparison with the other country, and country B is labour abundant country.

In symbolic terms, when:

$(PK/PL)\ A < (PK/PL)\ B$

Country A is relatively capital-abundant.

Here P stands for factor price

K for capital,

L for labour,

A and B are for the two respective countries.

Let's assume there are two countries A and B. A is the relatively capital abundant and B is labour abundant. Let us check all possible factor combinations (of labour and capital) that can produce the given amounts of two goods X and Y in each country. Economically, the most efficient factor combination depends upon the relative factor prices.

Ohlin's theorem may be verified diagrammatically-

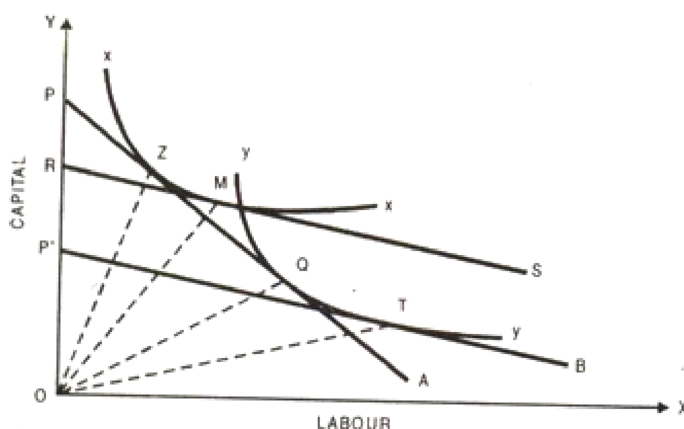


Fig. 1. The Price Criterion of Relative Factor Abundance

In the above diagram, xx and yy are isoquants (equal product curves) for two goods X and Y respectively. These two isoquants intersect only once so that the goods X and Y can be classified unambiguously according to factor intensity. It is easy to see that x is relatively capital- intensive, since the amount of capital is represented on the vertical axis. Similarly, good Y is labour-intensive, since the amount of labour is represented on the horizontal axis.

The most efficient factor combination depends upon the relative factor prices. To consider this, let us assume that the slope of the line P represents the relative factor prices in country A, i.e., (PK/PL) A. The line PA is tangent to yy isoquant at point Q. Similarly, xx isoquant is also tangential to PA at point Z. Since we have assumed that (PK/PL) A < (PK/PL) B i.e., capital in A is relatively cheaper, the slope of the line representing relative factor prices (PK/PL) in B must be less than that of PA.The line P'B is supposed to represent factor ratio in B. Line P'B is tangent to the isoquant yy at point T.

Now, the line RS is drawn parallel to P'B such that it becomes tangent to the isoquant xx at point M. Line RS lies above the line P'B implying that OR intercept of RS on the capital axis is greater than OP', the intercept of P'B on the same axis.

Under these assumptions, it appears that the equilibrium factor proportions are OZ for good X and OQ for Y in country A. That means, the cost of producing the given amount of X in country A is the cost of using the quantities of two factors labour and capital indicated by OZ at relative factor prices given by PA. This is equal to the cost of using capital in the amount of OP. Similarly, the cost of producing the given amount of Y in country A is equal to the cost of using capital in the same quantity (OP).

In country B, the equilibrium factor proportions are OM for X and OT for good Y. The relative factor prices are shown by P'B (or RS). And therefore, the costs of producing the given amounts of X and Y in this country are, in terms of capital, OR and OP respectively. Evidently, in country B the given amount of goods X is more expensive than the given amount of good Y.

Comparing the relative costs of the equal amounts of the two goods X and Y in the countries A and B, we thus find that good X is relatively cheaper in A and good Y is relatively cheaper in B. That means, the capital-abundant country has a comparative cost advantage in producing a capital-intensive good. So with the opening of trade with the other country, it must export such goods only. Likewise, the labour abundant country must export labour-intensive goods. The Heckscher-Ohlin theorem confines to the position that: a country exports goods produced relatively cheaper by using a relatively greater proportion of its relatively abundant factor.

The Physical Criterion of Relative Factor Abundance-

Now strictly implying relative factor endowments in physical quantities, a country is relatively capital abundant only if it possesses a greater proportion of capital to labour as compared to the other country.

To put it symbolically, then

$$(K/L)_A > (K/L)_B$$

Country A is relatively capital-abundant, whether or not the ratio of the prices of capital to labour is lower than in country B. They also lays down that the difference in factor prices is due to the difference in the relative endowment of the factors between countries. Thus asserts that once the relative physical quantities of each productive factor endowed in both the countries are known, the relative factor-price structure for each country can be easily inferred. Thus a country possessing relatively abundant capital will have a factor price structure such that capital will be cheaper as compared to labour it follows, thus, that a relatively cheaper factor in a country implies that it is relatively abundant.

Ohlin stresses the point that the factor-price structure will be different in two countries when the factor endowments are in differing proportions. Comparative advantages thus arise when the capital-abundant country (A) exports capital-intensive goods and imports labour- intensive goods and the labour abundant country (B) exports labour intensive goods and imports capital- intensive goods; because, $(PK/PL)_A < (PK/PL)_B < (PK/PL)_A$.

It can be explained with help of a diagram-

The theory lays down that country A will produce capital-intensive commodity (say machines) and country B will have a bias in producing labour-intensive commodity (say, cloth). If both the countries produce machines and cloth in the same proportion and production occurs along OR in Fig. 7.1, the country A would be producing at C and country B at D. The points C and D lie on the respective production possibility curves PQ and P_1Q_1 of these two countries.

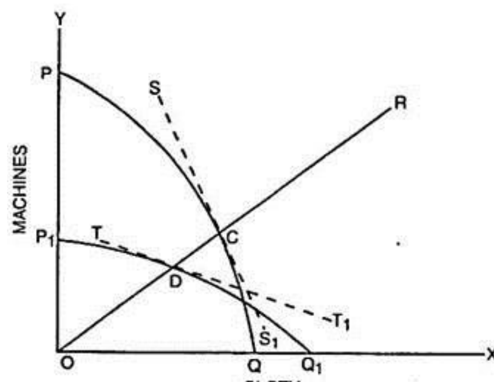


Fig. 7.1

Since at point C, the slope of country A's production possibility curve is more steep than the slope of the production possibility curve of country B at D, this will imply that cost of producing cloth in country A is higher than the cost of producing cloth in country B. So if the production takes place at points C and D, machines can be produced more cheaply in country A and cloth can be produced more cheaply in country B.

Since country A is capital-abundant and the production of machines is capital-intensive, country A will tend to extend the production of machines. Country B, at the same time being labour-abundant, will tend to extend the production of cloth, which is relatively labour- intensive.

Evaluation of Heckscher-Ohlin Theory of International Trade-

1. The theory based is on the general equilibrium theory of value, according to which both demand and supply conditions determine the prices of goods and factors. It rejects labour theory of value.

2. Heckscher-Ohlin theory removes the difference between international trade and inter-regional trade, for the factors determining the two are the same.

3. A significant improvement is the explanation offered for difference in comparative costs of commodities between trading countries.

4. Heckscher-Ohlin model provides a satisfactory picture of the future of foreign trade.

Criticisms-

1. Two by two by two models was criticized as it is basedon oversimplified assumptions.
2. It was called static theoryby Ohlin given its nature it only tells about the nature of trade at a given point of time.
3. Factors are not homogeneous was the argument because homogennity of factors is not visible within the country and thus it is unrealistic to co pare the skill of labour of two ountries.
4. Production techniques are not homogeneous as they differ from country to country based on the nature of that countey's economic conditions.
5. Taste and preferences differ from country to country and cannot be assumed as same.
6. Rejected constant returns as it is unrealistic as countries obtain economies of scale based on the advantages it posses.
7. Transport cost influences trade in reality and thus assuming no transport cost is unrealistic.
8. An unrealistic assumption of full employment and perfect completion makes the theory condiotional.
9. Leontif Paradox was falsified the theory because in determination of factor prices supply is more important than demand. The teory gave importance to demand and ignored supply of factors. The empirical study of Ohlin led to a paradoxical result that a capital intensive country was exporting more of labour intensive goods.

10. Partial equilibrium analysis as it has failed to develop a comprehensive general equilibrium theory.
11. Vague and Conditional theory as it had imposed conditions.

This theory is an improvised theory of classical theory, where it makes an attempt to explain international trade on general equilibrium setting.

Terms of Trade

Terms of trade refers to the rate at which the goods of one country are exchanged for the goods of another country. It is the measure of the purchasing power of the exports of a country in terms of its imports.

It expresses the relation between export price and import prices of its goods. A country's *terms of trade* measures a country's export prices in relation to its import prices. The terms of trade of a nation are given by the ratio of the price index of its exports to the price index of its imports.

Various terms of trade

1. Commodity or Net Barter Terms of Trade:

The commodity or net barter terms of trade is the ratio between the price of a country's export goods and import goods. Symbolically, it can be expressed as:

$$Tc = Px/Pm$$

Where Tc stands for the commodity terms of trade,

P for price,

The subscript x for exports and m for imports.

To measure changes in the commodity terms of trade over a period, the ratio of the change in export prices to the change in import prices is taken. Then the formula for the commodity terms of trade is

$$Tc = Px_1/Px_0 \,/\, Pm_1/Pm_0$$

Where the subscripts 0 and 1 indicate the base and end periods.

The concept of the commodity or net barter terms of trade has been used by economists to measure the gain from international trade. The terms of trade, as determined by the offer curves in the Mill-Marshall analysis, are related to the commodity terms of trade.

Limitations:

1. Problems of Index Numbers – here the problems associated are in terms of coverage, base year and method of calculation.

2. Change in Quality of Product- as the terms of trade are based on index numbers, it does ot take into account the changes in the quality and composition of goods between two countries.

3. Problem of Selection of Period- selecting the yer for study and comparison is difficult as the comparison period should neither be short period are for a long period.

4. Causes of Changes in Prices- it only shows changes in the export and import prices and not the extent and causes for change in prices.

5. Neglect of Import Capacity- it doesnot throw any light on capacity to import.

6. Ignores Productive Capacity- it ignores changes in the productive capacity of a country and thus fails to analyse the cost.

7. Not Helpful in Balance of Payment Disequilibrium- it is helpful only when BOP of a country includes exports and imports of goods and services and also the BOP balance oin the base year and the given year.If BOP includes unilateral payments, gifts remittances etc. measuring commodity terms of trade would yield wrong results.

8. Ignores Gains from Trade- it fails to explain gains from trade between developed and developing/underdeveloped country.

Gross Barter Terms of Trade

Professor Taussig excogitated a new concept called the Gross Barter Terms of Trade. He pointed out that instead of relating import and export prices, efforts should be made to relate quantities of imports and exports. The gross barter term of trade is a ratio of total physical quantities of imports to the total physical quantities of exports of a given country.

The gross barter terms of trade are the ratio between the quantities of a country's imports and exports. Symbolically, Tg = Qm/Qx,

where Tg stands for the gross terms of trade,

Qm for quantities of Imports and

Qx for quantities of exports.

The higher the ratio between quantities of imports and exports, the better would be the gross terms of trade. A larger quantity of imports can be had for the same volume of exports.

To measure changes in the gross barter terms of trade over a period, the index number of the quantities of imports and exports in base period and the end period are related to each other. The formula for this is:

$$T_G = \frac{Q_{M_1}/Q_{M_0}}{Q_{X_1}/Q_{X_0}} \times 100$$

Criticisms

1. Aggregating Goods, Services and Capital Transactions:

The concept of gross barter terms of trade has been criticized on the grounds for lumping together all types of goods and capital payments and receipts as one category in the index numbers of exports and imports. It lacks distinction between various types of transactions and all are lumped together.

2. Ignores Factor Productivity- ignores the effect of improvement in factor productivity on the terms of trade of a country.

3. Neglects BOP- gross barter terms of trade relates to the trade balance and ignores the influence of international capital receipts and payments of a trading country.

4. Ignores Improvements in Production:

This concept measures the terms of trade in terms of physical quantities of exports and imports but ignores qualitative improvements in the production of exportable and importable goods.

5. Not True Index of Welfare:

An improvement in gross barter terms of trade is regarded as an index of a higher level of welfare from trade. It will lead to unfavorable gross barter terms of trade but improve welfare.

Income terms of trade

- The concept of income terms of trade was developed by G.S. Dorrance and H. Staehle. This concept is an improvement upon the net barter terms of trade. It takes into account the indices of export and import prices and quantity index of exports. The income terms of trade are determined by the product of net barter terms of trade and the quantity index of exports. It shows a country's changing import capacity in relation to changes in its exports. The income terms of trade is the net barter terms of trade of a country multiplied by its export volume index.

Ty = Tc.Qx = Px.Qx/Pm = Index of Export Prices x Export Quantity/Index of Import Prices

Where Ty is the income terms of trade,

Tc the commodity terms of trade and

Qx the export volume index.

A rise in the index of income terms of trade implies that a country can import more goods in exchange for its exports. A country's income terms of trade may improve but its commodity terms of trade may deteriorate. Taking the import prices to be constant, if export prices fall, there will be an increase in the sales and value of exports. Thus while the income terms of trade might have improved, the commodity terms of trade might have deteriorated.

The income terms of trade is called the capacity to import. In the long-run, the total value of exports of a country must equal to its total value of imports,

i.e., Px.Qx = Pm.Qm or Px.Qx/Pm = Qm.

Thus Px.Qx/ Pm determines Qm which is the total volume that a country can import.

The capacity to import of a country may increase if other things remain the same

(i) the price of exports (Px) rises,

(ii) the price of imports {Pm) falls, or

(iii) the volume of its exports (Qx) rises.

Thus the concept of the income terms of trade is of much practical value for developing countries having low capacity to import.

Criticisms-

1. Fails to Measure Gain or Loss from Trade- The index of income terms of trade fails to measure precisely the gain or loss from international trade. When the capacity to import of a country increases, it simply means that it is also exporting more than before. Exports will also include the real resources of a country which can be used domestically to improve the living standard of its people.

2. Not Related to Total Capacity to Import:

The income terms of trade index is related to the export based capacity to import and not to the total capacity to import of a country which also includes its foreign exchange receipts.

3. Inferior to Commodity Terms of Trade:

Since the index of income terms of trade is based on commodity terms of trade and leads to contradictory results, the concept of the commodity terms of trade is usually used in preference to the income terms of trade concept for measuring the gain from international trade.

Trade Barriers-Tariffs and Quotas

Trade Barriers

Any hurdle, impediment or road block that hampers the smooth flow of goods/services and payments from one destination to another They arise from the rules and regulations governing trade either from home country or host country or intermediary. They are man made obstacles to the free movement of goods between different countries. Free and fair international trade is an ideal situation as it is beneficial to all countries. Even with the establishment of WTO trade barriers still exist.

Objectives of trade barriers

1. To protect domestic industries.
2. To promote new industries and R & D activities by providing a home market for domestic industries.
3. To maintain favourable balance of payment, by restricting imports from foreign country.
4. To conserve foreign exchange reserves of the country by restricting imports from foreign countries.
5. To protect the national economy from dumping by other countries with surplus production.
6. To mobilize additional revenue by imposing heavy duties on imports. This also restricts conspicuous consumption within the country.
7. To counteract trade barriers imposed by other countries.
8. To encourage domestic production in the domestic market and thereby making the country strong and self reliant

Types of Trade Barriers

There are two types of trade barriers. They are-

a. Tariff barriers b. Non-Tariff barriers.

Tariff Barriers

A tariff barrier is a levy collected on goods when they enter a domestic tariff area through customs. Tariff refers to the duties imposed on internationally traded commodities when they cross national boundaries and may be in the form of heavy taxes/import duties. Tariffs enhance the price of the imported goods, thereby restricting their sales as well as their import. The aim of tariff is thus to raise the prices of imported goods in domestic markets, reduce their demand and thereby discourage their imports.

Classification of Tariffs

Tariffs are classified on the basis of origin and destination of the goods crossing national boundaries:

1. Export duty: Tax levied by the country of origin, on a commodity designated for use in other countries. The majority of finished goods do not attract export duty. Such duties are normally imposed on the primary products in order to conserve them for domestic industries/consumers.
2. Import duty: It is a tax imposed on a commodity originating in another country by the country for which the product is designated. The purpose of heavy duty is to raise revenue and to provide protection to domestic countries.
3. Transit duty: Tax imposed on a commodity when it crosses the national frontier between the originating country and the country to which it is consigned to.

On the basis of the purpose they serve

1. Revenue tariff: It aims at collecting substantial revenue for the government. Here the duty is imposed on items of luxury consumer goods.
2. Protective tariff: It aims at giving protection to home industries by restricting or eliminating competition. These tariffs are usually high so as to reduce imports.

On the basis of quantification/ protective tariffs:

1. Specific duty: A flat sum collected on physical unit of commodity imported. Ad-valorem duty: This duty is imposed at a fixed percentage on the value of commodity imported.

2. Compound duty: Here the commodity is subjected to both specific and ad-valorem duty, and is levied by government.

3. Ad valorem duty: It is imposed as a percentage of the total value of the imported common duty. It is the fixed percentage of cost, insurance and freight of the commodity.

4. Sliding scale duty: Import duties varies with the prices of the commodities

On the basis of trade relations:

1. Single column tariff: Tariff rates are fixed for similar commodities and the same rates are made applicable to imports from all the countries. It is non discriminatory tariff.
2. Double column tariff: Here, two different rates of duties are fixed, and the government declares both the rates in the beginning or may also declare one rate at the beginning and the other rate after the agreement. The lower rate is made applicable to a friendly country or to a country with which the importing country has a bilateral trade agreement. The higher rate is applicable to all other countries.

Other types of tariffs are-

1. General and conventional tariffs-Under General type of tariff structure, the government in the beginning of the year itself will announce the list of tariffs as per its annual tariff policy.

Conventional tariffs are purely based on trade agreements and are different for different countries and different commodities.

2. Maximum and minimum tariffs-Fixes two tariffs for same commodity for different countries.

3. Multiple or triple column tariffs- Multiple column tariff refers to two or more tariff rates are levied on each category of commodities. They will have different lists of tariffs-General, intermediate and preferential.

On the basis of retaliation-

1. Retaliatory tariff- is imposed on those countries imports to punish the latter for its trade policy which can impact exports or BOP of another country.
2. Countervailing duties- is imposed on the commodity whose export price is reduced by other country through an export subsidy. It is protect the domestic industries of importing country.

Types of Non-tariff barriers

NTBs are obstacles to imports other than tariffs. They are administrative measures that are imposed by a domestic government to discriminate against foreign goods to protect domestic industries. Quantitative trade restrictions are import quotas, tariff quotas, voluntary export restraints.

Quota system: it is protectionist policy. A quota is a government-imposed trade restriction that limits the number, or monetary value, of goods that can be imported or exported during a particular time period. Quotas are used in international trade to help regulate the volume of trade between countries. They are sometimes imposed on specific goods to reduce imports, thereby increasing domestic production.The quantity of a commodity permitted to be imported from various countries during a given period is fixed in advance.

Objectives –

1. To protect the domestic industries from foreign competition.
2. To correct adverse BOP by restricting imports.
3. To check speculation in imports.
4. To stabilize and maintain the internal price level by regulating imports.
5. To save country's foreign exchange reserves by importing only the requisite goods.
6. Discourage luxury imports.

7. Strengthen country's bargaining on the basis of reciprocal trade agreements.

8. To adopt retaliatory measures against the countries resorting to restrictive trade practices.

Tariff quota:

Imports of a commodity up to a specific volume are allowed duty free or at a special low rate. Imports in excess of this limit are subject to duty or a higher rate of duty.

Merits –

a. It is a combination of tariff and quota.

b. It restricts imports and helps in balancing foreign exchange reserves.

c. It yields revenue to the country.

d. It is flexible in nature.

e. Domestic goods prices are related to foreign goods

f. It makes provision for imports based on the need and necessity at low tariff rates.

Demerits-

a. Tariff quota leads to raise in imports when goods are allowed duty free, this disturbs the domestic price levels.

b. When imports exceeds the quota limit, for imports will benefit export countries.

c. It is discriminatory in nature.

Unilateral quota:

Here a country unilaterally fixes a ceiling on the quantity of the import of a particular commodity. The autonomously fixed quota may be either global or allocated. Here the full quota may be imported from any one country. Under allocated quota, the total quantity of quota is distributed among different countries.

Merits of global quota-

a. Can import from the country where it has favorable terms of trade.

b. To capture the market of the importing country, the exporting country can lower the prices of their products.

Demerits –

a. Importing country can be biased by favoring those countries of its choice and import full quota from that country.
b. The smaller exports countries are at a disadvantage position as against large exports.
c. It helps in protecting domestic producers.
d. It leads to over supply of goods and services in the markets and can bring down the prices.
e. It can also create shortage once quota is exhausted and lead to price rise.

The allocated quota system helped countries to overcome the defects of global quota system.

Demerits –

a. It is a rigid system as import quota is fixed.
b. It does not consider cost and quality of the product.
c. it can lead to monopoly practices.
d. It is discriminatory in nature.

Bilateral quota: Results from negotiation between the importing country and a particular supplier country, or between the importing country and export groups within the supplier country. Here quotas are fixed by bilateral agreements, also helps in checking the fluctuations in import prices. It checks export monopoly trade practices.

Demerits-

a. It leads to corruption while trade agreements take place.
b. It leads to formation of international cartels when firms are asked to supply products.
c. The exporting countries can increase the prices of the product post agreement.

d. It encourages cut throat competition.

Mixing quota:

Here the producers are obliged to utilize domestic raw materials up to a certain proportion in the production of a finished product. And later utilize imported raw materials. Thus the country has import fixed quantity of imported raw materials.

Merits-

a. It protects domestic industries, especially producers of raw materials against foreign competition.

b. It helps to save forex reserves of a country.

It encourages self reliance by increasing production of raw materials, semi finished products etc.

Demerits-

a. It leads to rise in domestic prices.

b. It does not ensure quality production.

Import Licensing:

It is to administer the various types of quotas. Here the prospective importers are obliged to obtain a license from the licensing authorities. The possession of an import license is necessary to obtain the foreign exchange to pay for the imports. It is a powerful device for controlling the quantity of imports. Import license are issued by appropriate authority to the importers for specified quantities of commodities to be imported.

Merits-

a. It checks domestic shortage of products.

b. Here imports quantities are fixed by government.

c. It checks price fluctuations.

d. It is a flexible system.

Demerits-

a. It is rigid as it restricts imports.

b. The Government auction of import licenses leads to price rises.

c. It leads to monopoly in import trade.

d. It encourages political favouritism and bureaucratic corruption.

Voluntary Export Restraints:

They are bilateral arrangements instituted to restrain the rapid growth of exports of specific manufactured goods. U.S and EU have regulated the imports of several products (e.g--- MFA—Multi-Fibre arrangement). Under VERs, the exporting country voluntarily restrains the export of the specific product in order to either help the other country to reduce its trade deficit or to protect domestic industry (of the importing country). VERs are adopted under pressure from the importing country

State Trading:

It is partial or complete control of the government in foreign trade. It refers to import-export activities conducted by the government or a govt. agency. State trading acts as a barrier, restricting the freedom of private parties. Preferential treatment through trading blocs: Some countries form regional groups and offer special concessions and preferences to member countries. As a result trade is developed among the member countries and allows advantages to all member countries. But it acts as a barrier to non-member countries.

UNIT-V: Balance of Payments and Foreign Exchange

Balance of trade and Balance of Payment

Balance of trade is the difference in value over a period of time between a country's imports and exports of goods and services, usually expressed in the unit of currency of a particular country or economic union.

If the exports of a country exceed its imports, the country is said to have a favourable balance of trade, or a trade surplus. Conversely, if the imports exceed exports, an unfavorable balance of trade, or a trade deficit, exists. The balance of trade is the largest component of the country's balance of payment.

Economists use the BOT as a statistical tool to help them understand the relative strength of a country's economy versus other countries' economies and the flow of trade between nations.

Debit items include imports, foreign aid, domestic spending abroad and domestic investments abroad. Credit items include exports, foreign spending in the domestic economy and foreign investments in the domestic economy. By subtracting the credit items from the debit items, economists arrive at a trade deficit or trade surplus for a given country over the period of a month, quarter or year.

The balance of trade is the most significant component of the current account. That's what measures a country's net income earned on international assets. The trade balance is the easiest to measure, that's because all goods and many services must pass through customs.

Favorable Trade Balance

All countries try to create trade policies that encourage a trade surplus. They consider this to be a favorable trade balance because it's like making profit as a country. They prefer to sell more and receive more capital for the residents

To maintain this favorable trade balance, leaders often resort to trade protection. They protect domestic industries, by levying tariffs, quotas or subsidies on imports. That usually works great until other countries retaliate with their tariffs.

Unfavorable Trade Balance

Trade deficits are usually an unfavorable balance of trade. That's because most countries with trade deficits import more in consumer products than they export in raw materials. Its domestic businesses don't gain the experience needed to make those higher value-added products. It makes the country dependent on global commodities's prices.

Balance of Payment

The balance of payments is a consolidated account of the receipts and payments from and to other countries arising out of all economic transactions during the course of a year. Balance of Payment Account is a summary of international transactions of a country for a given period' (i.e., financial year). It records a country's transactions with the rest of the world involving inflow and outflow of foreign exchange.

In the words of C. B. Kindleberger; "The balance of payments of a country is a systematic record of all economic transactions between the residents of the reporting and the residents of the foreign countries during a given period of time."

An economic transaction refers to transactions of visible goods (merchandise) and invisible goods (services), assets, gifts, etc. In other words, BOP shows how money is spent abroad (i.e. payments) and how money is received domestically (i.e., receipts). Thus, a BOP account records all payments and receipts arising out of all economic transactions.

All payments are regarded as debits (i.e., outflow of money) and are recorded in the accounts with a negative sign and all receipts are regarded as credits (i.e., inflow of money) and are recorded in the accounts with a positive sign.

Components of BOP Accounts:

According to the broad nature of the transactions the BOP of a country is divided into two main parts:

(i) the current account,

(ii) Capital account.

(iii) The other part is official reserve account.

(i) Current account:

The current account of BOP includes all transaction arising from trade in currently produced goods and services, from income accruing to capital by one country and invested in another and from unilateral transfers, both private and official.

Table 5.1: The Schematic BOP

A. Current Account

1. *Merchandise Trade*
   - a) Visible exports
   - b) Visible imports
2. *Invisible Trade*
   - a) Invisible exports
   - b) Invisible imports
3. *Other Flows*
   - a) Investment income
   - b) Unrequited transfers

B. Capital Account

- a) Long term capital transactions
- b) Short term capital transactions

C. Balancing Item

Net Errors and Omissions

D. Official Reserve Account

(ii) The Capital account:

The capital account shows transactions relating to the international movement of ownership of financial assets. It refers to cross border movements in foreign assets like shares, property or direct acquisitions of companies' bank loans, government's securities, etc. In other words, capital account records export and import of capital from and to foreign countries.

The capital account is divided into two main subdivisions one is the short term and another is the long term movements of capital. A short term capital is one which matures in one year or less, such as bank accounts. A long term capital is one whose maturity period is longer than a year, such as long term bonds or physical capital.

(iii) Statistical discrepancy-errors and omissions:

Since BOP always balances in theory, all debits must be offset by all credits and vice versa. In practice, rarely it happens particularly because statistics are incomplete as well as imperfect. That is why errors and omissions are considered, so that BOP accounts are kept in balance.

(iv) Official Reserve Account:

The category of official reserve account covers the net amount of transactions by governments. This account covers purchases and sales of reserve assets (such as gold, convertible foreign exchange and special drawing rights) by the central monetary authority.

. *Disequilibrium in BOP- Causes and Methods of Correction*

Balance of Payments Equilibrium:

"Equilibrium is that state of the balance of payments over the relevant time period which makes it possible to sustain an open economy without severe unemployment on a continuing basis". A deficit or a surplus in a BOP of a country appears when its credits do not match with its debits.

Causes for Disequilibrium-

1. Temporary Changes (or Disequilibrium):

There may be a temporary disequilibrium caused by random variations in trade, seasonal fluctuations, the effects of weather on agricultural production, etc. Deficits or surpluses arising from such temporary causes are expected to correct themselves within a short time.

2. Fundamental Disequilibrium:

Fundamental disequilibrium refers to a persistent and long-run BOP disequilibrium of a country. It is a chronic BOP deficit, according to IMF.

It is caused by dynamic factors as:

(1) Changes in consumer taste within the country or abroad which reduce the country's exports and increase its imports.

(2) Continuous fall in the country's foreign exchange reserves due to supply inelasticities of exports and excessive demand for foreign goods and services.

(3) Excessive capital outflows due to massive imports of capital goods, raw materials, essential consumer goods, technology and external indebtedness.

(4) Low competitive strength in world markets which adversely affects exports.

(5) Inflationary pressures within the economy which make exports dearer.

3. Structural Changes (or Disequilibrium):

Structural changes bring about disequilibrium in BOP over the long run.

They may result from the following factors:

(a) Technological changes in methods of production of products in domestic industries or in the industries of other countries. They lead to changes in costs, prices and quality of products.

(b) Import restrictions of all kinds bring about disequilibrium in BOP.

(c) Deficit in BOP also arises when a country suffers from deficiency of resources which it is required to import from other countries.

(d) Disequilibrium in BOP may also be caused by changes in the supply or direction of long-term capital flows. More and regular flow of long-term capital may lead to BOP surplus, while an irregular and short supply of capital brings BOP deficit.

4. Changes in Exchange Rates:

Changes in foreign exchange rate in the form of overvaluation or undervaluation of foreign currency lead to BOP disequilibrium. When the value of currency is higher in relation to other currencies, it is said to be overvalued. Opposite is the case of an undervalued currency. Overvaluation of the domestic currency makes foreign goods cheaper and exports dearer in foreign countries. Undervaluation of the currency makes BOP favourable for the country by encouraging exports and inflow of capital and reducing imports.

5. Cyclical Fluctuations (or Disequilibrium):

Cyclical fluctuations in business activity also lead to BOP disequilibrium. When there is depression in a country, volumes of both exports and imports fall drastically in relation to other countries. But the fall in exports may be more than that of imports due to decline in domestic production. Therefore, there is an adverse BOP situation. On the other hand, when there is boom in a country in relation to other countries, both exports and imports may increase. But there can be either a surplus or deficit in BOP

situation depending upon whether the country exports more than imports or imports more than exports. In both the cases, there will be disequilibrium in BOP.

6. Changes in National Income:

A change in the country's national income can lead to imbalance in BOP. If the national income of a country increases, it will lead to an increase in imports thereby creating a deficit in its balance of payments, other things remaining the same. If the country is already at full employment level, an increase in income will lead to inflationary rise in prices which may increase its imports and thus bring disequilibrium in the balance of payments.

7. Price Changes:

Inflation or deflation is another cause of disequilibrium in the balance of payments. If there is inflation in the country, prices of exports increase. As a result, exports fall. At the same time, the demands for imports increase. Thus increase in export prices leading to decline in exports and rise in imports results in adverse balance of payments.

8. Stage of Economic Development:

A country's balance of payments also depends on its stage of economic development. If a country is developing, it will have a deficit in its balance of payments as it imports raw materials, machinery, capital equipment, and services associated with the development process and exports primary products. The country has to pay more for costly imports and gets less for its cheap exports. This leads to disequilibrium in its balance of payments.

9. Capital Movements:

Borrowings and lending's or movements of capital by countries also result in disequilibrium in BOP. A country which gives loans and grants on a large scale to other countries has a deficit in its BOP on capital account. If it is also importing more, as is the case with the USA, it will have chronic deficit.

On the other hand, a developing country borrowing large funds from other countries and international institutions may have a favourable BOP. But such a possibility is

remote because these countries usually import huge quantity of food, raw materials, capital goods, etc. and export primary products. Such borrowings simply help in reducing BOP deficit.

10. Political Conditions:

Political condition of a country is another cause of disequilibrium in BOP. Political instability in a country creates uncertainty among foreign investors which leads to the outflow of capital and retards its inflow. This causes disequilibrium in BOP of the country. Disequilibrium in BOP also occurs in the event of war or fear of war with some other country.

Implications of Disequilibrium:

Disequilibrium in the balance of payments, whether it is a deficit or surplus has important implications for a country. A deficit in the combined current and capital accounts is regarded as undesirable for the country. This is because such a deficit has to be covered by borrowing from abroad or attracting foreign exchange or capital from abroad. This may require paying high interest rates.

Measures to Correct Deficit Balance of Payments

1. Adjustment through Exchange Depreciation (Price Effect):

Under flexible exchange rates, the disequilibrium in the balance of payments is automatically solved by the forces of demand and supply for foreign exchange. The exchange rate varies with varying supply and demand conditions. Depreciation of a currency means that its relative value decreases. Depreciation has the effect of encouraging exports and discouraging imports. When exchange depreciation takes place, foreign prices are translated into domestic prices.

2. Devaluation or Expenditure-Switching Policy:

Devaluation raises the domestic price of imports and reduces the foreign price of exports of a country devaluing its currency in relation to the currency of another country. Devaluation is referred to as expenditure switching policy because it switches expenditure from imported to domestic goods and services.

When a country devalues its currency, the price of foreign currency increases which makes imports dearer and exports cheaper. This causes expenditures to be switched from foreign to domestic goods as the country's exports rise and the country produces more to meet the domestic and foreign demand for goods with reduction in imports. Consequently, the balance of payments deficit is eliminated.

3. Direct Controls:

To correct disequilibrium in the balance of payments, government also adopts direct controls which aim at limiting the volume of imports. The government restricts the import of undesirable or unimportant items by levying heavy import duties, fixation of quotas. The government also imposes exchange controls. Exchange controls have a dual purpose. They restrict imports and also control and regulate the foreign exchange. With reduction in imports and control of foreign exchange, visible and invisible imports are reduced. Consequently, an adverse balance of payment is corrected.

4. Adjustment through Capital Movements:

A country can use capital imports to correct a deficit in its balance of payments. A deficit can be financed by capital inflows. When capital is perfectly mobile within countries, a small rise in the domestic rate of interest brings a large inflow of capital.

The balance of payments is said to be in equilibrium when the domestic interest rate equals the world rate. If the domestic interest rate is higher than the world rate, there will be capital inflows and the balance of payments deficit is corrected.

5. Adjustment through Income Changes:

Given the foreign exchange rate and prices in a country, an increase in the value of exports, causes an increase in the incomes of all persons associated with the export industries. These, in turn, create demand for other goods and services within the country. This will raise the incomes of persons engaged in the latter industries and services. This process will continue and the national income increases by the value of the multiplier.

6. Stimulation of Exports and Import Substitutes:

A deficit in the balance of payments can also be corrected by encouraging exports. Exports can be encouraged by producing quality products, by increasing exports through increased production and productivity, and by better marketing. They can also be increased by a policy of import substitution.

It means that the country produces those goods which it imports. In the beginning imports are reduced but in the long run exports of such goods start. An increase in exports causes the national income to rise by many times through the operation of the foreign trade multiplier.

The foreign trade multiplier expresses the change in income caused by a change in exports. Ultimately, the deficit in the balance of payments is removed when exports rise faster than imports.

7. Expenditure-Reducing Policies:

A deficit in the balance of payments implies an excess of expenditure over income. To correct it, expenditure and income should be brought into equality. For this expenditure reducing monetary and fiscal policies are used. A tight monetary policy relates to increase in interest rates to reduce money supply and a tight fiscal policy relates to reduction in government expenditure and or increase in taxes.

Thus expenditure reducing policies reduce aggregate demand through higher taxes and interest rates, thereby reducing expenditure and output. The reduction in expenditure and output, in turn, reduces the domestic price level. This gives rise to switching of expenditure from foreign to domestic goods.

A correction of disequilibrium calls for a judicious combination of the following methods:

(i) Monetary and fiscal changes affecting income and prices in the country;

(ii) Exchange rate adjustment, i.e., devaluation or appreciation of the home currency;

(iii) Trade restrictions, i.e., tariffs, quotas, etc.

(iv) Capital movement, i. e., borrowing or lending aboard; and

(v) Exchange control.

Determination of Foreign exchange rate

Foreign exchange rate-

Exchange rates are the amount of one currency that can be exchanged for another. The exchange rate is the rate at which one currency trades against another on the foreign exchange market. International currency exchange rates display how much of one unit of a currency can be exchanged for another currency. For example, if one US dollar is worth 10 000 Japanese Yen, then the exchange rate of dollar is 10 000 Yen. Thus, the exchange rate is a conversion factor, a multiplier or a ratio, depending on the direction of conversion.

Definitions

Dr. S.E. Thomas defines foreign exchange is that branch of science of economics in which we seek to determine the principles on which the peoples of the world settle their debts one to the other.

S.J Chapman – is the machinery whereby payments are effected in international trade is known as foreign exchange.

Dr. Brain Tew - foreign exchange is the problem of external liquidity.

It is the system whereby different nations clear off their international obligations. Foreign exchange includes all those methods, means and instruments with the help of which countries of the world clear off their international indebtedness. Thus foreign exchange means the price of one unit of the foreign currency in terms of domestic currency.

Determination of exchange rate

There are two methods of foreign exchange rate determination. One method was the classical gold standard mechanism and another method the classical paper currency system. Today, gold standard mechanism does not operate since no standard monetary unit is now exchanged for gold. The first is known as the purchasing power parity theory and the second is known as the demand supply theory or balance of payments theory. There are no believers of purchasing power parity theory, and hence today it is determined by demand-supply approach.

Demand-Supply Approach of Foreign Exchange

Economists apply supply-demand conditions of price theory in the foreign exchange market. The exchange rate in a free market is determined by the demand for and supply of foreign exchange. The equilibrium exchange rate is the rate at which the demand for foreign exchange equals to supply of foreign exchange.

Ragnar Nurkse defined the equilibrium of exchange rate as “that rate which over a certain period of time, keeps the balance of payment in equilibrium.”

The demand for foreign exchange

The demand for foreign currency arises from those traders who have to make payments for imported goods to the foreign exporters. The need arises for the traders as the exporters insist payments in national currency. Thus the demand for foreign currency arises from those individuals who import goods and services or wish to make payments in foreign currencies.

To explain the determination of foreign exchange rate based on demand for and supply of foreign exchange -Indians demand or buy dollars by paying rupee in the foreign exchange market. A country releases its foreign currency for buying imports. Thus what appear in the debit side of the BOP account are the sources of demand for foreign exchange. Larger the volume of imports, greater is the demand for foreign exchange.

The demand curve for foreign exchange is negative sloping. A fall in the price of foreign exchange or a fall in the price of dollar in terms of rupee (i.e., dollar depreciates) means that foreign goods are now cheaper. Thus, an Indian could buy more American goods at a low price. Consequently, imports from the USA would increase-resulting in an increase in the demand for foreign exchange, i.e., dollar.

And if the price of foreign exchange or the price of dollar rises (i.e., dollar appreciates) foreign goods will become expensive leading to a fall in import demand and, hence, fall in the demand for foreign exchange. Since price of foreign exchange and demand for foreign exchange move in opposite directions, the importing country’s demand curve for foreign exchange is downward sloping from left to right.

In the Fig., DD_1 is the demand curve for foreign exchange. In this figure, exchange rate is expressed in terms of domestic currency that costs 1 unit of foreign currency (i.e.,

dollar per rupee) on the vertical axis. This makes the demand curve for foreign exchange negative sloping, and if the exchange rate is expressed in terms of foreign currency that could be purchased with a 1 unit of domestic currency (i.e., dollar per rupee), the demand curve would exhibit positive slope.

Supply of Foreign Exchange:

Supply of foreign currency comes from receipts for its exports. If the foreign nationals and firms intend to purchase Indian goods or buy Indian assets or give grants to the Government of India, the supply of foreign exchange is generated. In other words, what the Indian exports (both goods and invisibles) to the rest of the world is the source of foreign exchange. All the transactions that appear on the credit side of the BOP account are the sources of supply of foreign exchange.

A rise in the rupee per dollar exchange rate means that Indian goods are cheaper to foreigners in terms of dollars. This will induce India to export more. Foreigners will find that investment is more profitable. Thus, a high price or exchange rate ensures larger supply of foreign exchange. Hence, a low exchange rate causes exchange rate to fall. Thus, the supply curve of foreign exchange, SS_1, is positive sloping.

Equilibrium of exchange rate-

The equilibrium exchange rate is determined at that point where the demand for foreign exchange equals the supply of foreign exchange. In Fig, DD_1 and SS, curves intersect at point E. The foreign exchange rate thus determined is OP.

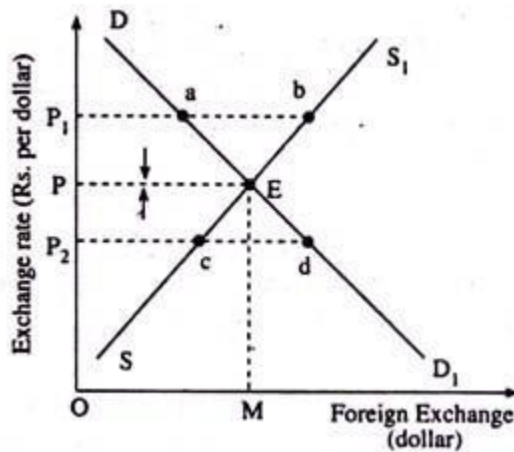


Fig. 6.6 : Determination of Equilibrium Exchange Rate

At this rate, quantities of foreign exchange demanded (OM) equals quantity supplied (OM). The market is cleared and there is no incentive on the part of the players to change the rate determined. At the rate OP, demand for foreign exchange is matched by the supply of foreign exchange.

If the current exchange rate OP exceeds the equilibrium rate of exchange (OP), there occurs an excess supply of dollar by the amount 'ab'. The bank and other institutions dealing with foreign exchange, wish to make money by exchanging currency, would lower the exchange rate to reduce excess supply. Thus, exchange rate will tend to fall until OP is reached. Similarly, an excess demand for foreign exchange by the amount 'cd' arises if the exchange rate falls below OP, i.e., OP. Banks would then experience a shortage of dollars to meet the demand. The rate of foreign exchange will rise till demand equals supply. The exchange rate are determined by floating or 'flexible exchange' rate. A floating exchange rate, by definition, results in an equilibrium rate of exchange that will move up and down according to a change in demand and supply forces.

The process by which currencies float up and down following a change in demand or a change in supply forces is explained with help of diagram-

(a) (b)

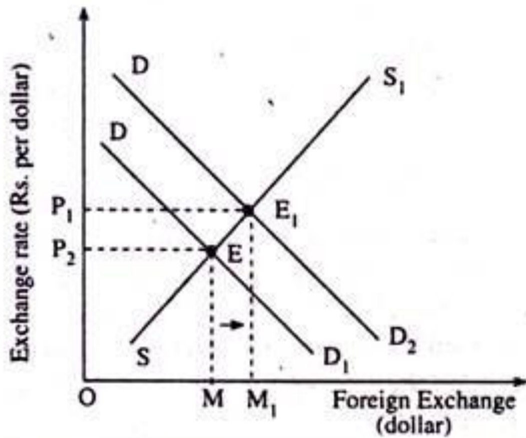


Fig. 6.7 : Change in Equilibrium Exchange Rate following a Change in Demand

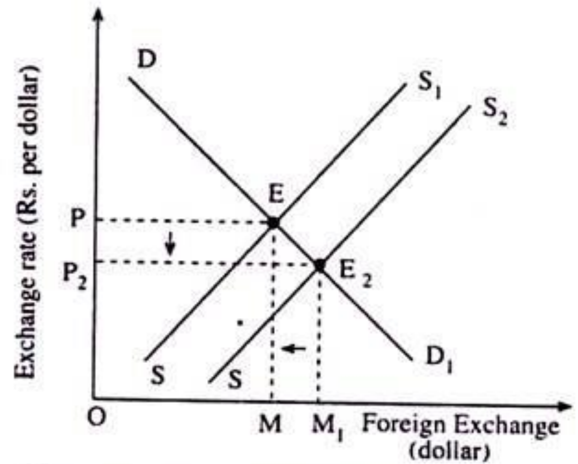


Fig. 6.8 : Change in Equilibrium Exchange Rate following a Change in Supply

An increase in demand for imports of goods and services results in demand for dollar rises. This results in a shift in the demand curve from DD_1 to DD_2. Consequently, exchange rate rises as determined by the intersection of the new demand curve and supply curve in diagram (a). With this dollar appreciates while rupee depreciates.

If the supply curve shifts from SS_1 to SS_2 as shown in diagram (b) the new exchange rate is determined would be OP_2. An increase in exports by India to US, the supply curve would then shift rightward. Consequently, dollar depreciates and rupee appreciates. New exchange rate is settled at that point where the new supply curve SS_2 intersects the demand curve at E_2.

This is the balance of payments theory of exchange rate determination. Wherever government does not intervene in the market, a floating or a flexible exchange rate prevails. Such a system may not necessarily be ideal since frequent changes in demand and supply forces cause frequent as well as violent changes in the exchange rate.

Causes for changes in exchange rate

There are various factors which affect or influence the demand for and supply of foreign currency leading to short-term fluctuations in the exchange rate. They are as follows-

1. Changes in Prices- the changes in relative price levels cause changes in exchange rates. The changes in market inflation cause changes in currency exchange rates.

A country with a lower inflation rate than another will see an appreciation in the value of its currency. The prices of goods and services increase at a slower rate where the inflation is low. A country with a consistently lower inflation rate exhibits a rising currency value while a country with higher inflation typically sees depreciation in its currency and is usually accompanied by higher interest rates. To explain, if inflation in UK is relatively lower than elsewhere, then UK exports will become more competitive, and there will be an increase in demand for Pound Sterling to buy UK goods. Also, foreign goods will be less competitive and so UK citizens will buy fewer imports. Therefore countries with lower inflation rates tend to see an appreciation in the value of their currency.

2. Changes in interest rates- Changes in interest rate affect currency value and dollar exchange rate. Increases in interest rates causes a country's currency to appreciate because higher interest rates provide higher rates to lenders, thereby attracting more foreign capital, which causes a rise in exchange rates. The opposite will be the case, if interest rate falls in the home country.

3. Changes in exports and imports- Any change in imports or exports will certainly cause a change in the rate of exchange. If imports exceed exports, the demand for foreign currency rises; hence the rate of exchange moves against the country. Conversely, if exports exceed imports, the demand for domestic currency rises and the rate of exchange moves in favour of the country.

4. Capital movements- International capital movements from one country for short periods to avail of the high rate of interest prevailing abroad or for long periods for the purpose of making long term investment abroad will impact exchange rates. Any export or import of capital from one country to another will bring about a change in the rate of exchange.

5. Influences of Banks-Banks are the major dealers in foreign exchange. They sell drafts, transfer funds, issue letters of credit, accept foreign bills of exchange, take up arbitrage, etc. These operations influence the demand for and supply of foreign exchange, and hence the exchange rates.

6. Changes in bank rate- the changes in bank rate will influence exchange rate. Any increase in bank rate in relative to other countries, then more funds will flow into the country from abroad to earn higher interest rates. It leads to rise in demand for the domestic currency and the exchange rate will move in favour of the country and vice versa when bank rate falls.

7. Speculation- These include transactions ranging from anticipation of seasonal movements in exchange rates to the extreme one, viz., flight of capital. In periods of political uncertainty, there is heavy speculation in foreign money. There is a scramble for purchasing certain currencies and some currencies are unloaded. Thus, speculative activities bring about wide fluctuations in exchange rates.

8. Stock exchange influences- Stock exchange activities in foreign securities, debentures, stocks and shares exert significant influence on exchange rate. When stock exchanges help in the sale of securities, debentures etc to foreigners, the demand for domestic currency will increase on the part of foreigners and exchange rate tends to rise and vice versa.

9. Structural influences- structural changes in any economy will lead to change in the consumer demand for goods. They include technological changes, innovative goods. Such structural changes tend to increase the foreign demand for domestic products leading to rise in exports, greater demand for domestic currency, appreciated value and in the exchange rate.

10. Political Conditions-Political stability of a country can help very much to maintain a high exchange rate for its currency; for it attracts foreign capital which causes the foreign exchange rate to move in its favour. Political instability, on the other hand, causes a panic flight of capital from the country hence the home currency depreciates in the eyes of foreigners and consequently, its exchange value falls.

11. Policy of exchange control and protection- policies of exchange control and protection discourages imports leading to fall in the demand for foreign currency.

12. Types of economy- for a developing country, its imports would be in larger quantities and its capacity to export low. Here demand for foreign exchange will be more leading to depreciation of its exchange rate and vice versa.

Market Objectives and Methods of Exchange Control

Exchange controls are implemented by governments and central banks to ban or restrict the amount of foreign currency or local currency that can be traded or purchased. These controls allow countries a greater degree of economic stability by limiting the amount of exchange rate volatility due to currency inflows/outflows. Exchange control is also being used as a protective device in modern times, the main objective of exchange control is to maintain the stability of the exchange rate of a currency and keep the balance of payments in regular order. Exchange control was first adopted by Germany.

G.N. Halms defines it thus: "By exchange control we refer to measures which replace part of the equilibrating functions of the foreign exchange market by regulation alien to the pricing process."

P.T. Ellsworth provides a comprehensive definition of exchange control in the following words: "Exchange control means dealing with the balance of payments difficulties, disregards market forces and substitutes for them the arbitrary decision of government officials. Imports and other international payment are no longer determined by the international price comparisons, but the considerations of national need."

Objectives of Foreign Exchange Control:

1. Correcting Balance of Payments
2. To Protect Domestic Industries
3. To Maintain an Overvalued Rate of Exchange
4. To Prevent movement of Capital
5. Policy of Differentiation
6. Other Objectives

They are:

(i) To earn revenue in the form of difference between selling and purchasing rates of foreign exchange;

(ii) To stabilise the exchange rates;

(iii) To make imports of preferable goods possible by making the necessary foreign exchange available; and

(iv) To pay off foreign liabilities with the help of available foreign exchange resources.

Features of Exchange Control

1. The Government centralises all foreign exchange operations in the hands of the Central bank which administers the regulations pertaining to it.
2. The earned foreign exchange is deposited with the central Bank.
3. Importers of the country are allocated foreign exchange at official rates to enable them to make payments for the goods imported from abroad.
4. Central bank will determine the priorities in allocation of scarce foreign currencies.
5. It results in fall in import volume.
6. Leads to establishment of government monopoly in the foreign exchange business.
7. The central bank fixes the official exchange rate from time to time.
8. The central bank regulates demand and supply to maintain official exchange rate.

The methods of exchange control

They are classified into two types, direct and indirect. Direct methods of exchange control include those devices which are adopted by governments to have an effective control over the exchange rate, while indirect methods are designed to regulate international movements of goods.

Direct Methods of Exchange Control:

In direct exchange control, measures are adopted which effectuate immediate direct restriction on foreign exchange from all sides - its quantum, use and allocation.

1. Intervention:

It refers to the government's intervention in the free working of the exchange market with a view to overvalue or undervalue the country's currency in terms of foreign money.

The government or the central bank of a country can intervene in the free market by resorting to buying and selling the home currency against foreign currency in

the foreign exchange market to support or depress the exchange rate of its currency.

2. Pegging Operations:

Government intervention in the foreign exchange market takes in the form of pegging up or pegging down of the currency of the country to a chosen rate of exchange. Since undervaluation or overvaluation is not the equilibrium rate, it has to be pegged, pegging means keeping a fixed exchange value of a currency. Pegging operations take the form of buying and selling of the local currency by the central bank of a country in exchange for the foreign currency in the foreign exchange market, in order to maintain an exchange rate whether, it is overvalued or undervalued.

Pegging down means holding fixed undervaluation, i.e., to maintain the exchange rate at a lower level. Pegging up refers to overvaluation, which tends to increase the demand for foreign currencies by creating import surplus.

Government intervention or pegging up and pegging down operations are normally used as temporary expedients to remove fluctuations in the exchange rate.

3. Exchange Restrictions:

Exchange restrictions refer to the policy or measures adopted by a government which restrict or compulsory reduce the flow of home currency in the foreign exchange market. Exchange restrictions may be of three types:

(i) The government may centralise all trading in foreign exchange with itself or a central authority, usually the central bank;

(ii) the government may prevent the exchange of local currency against foreign currencies without its permission;

(iii) the government may order all foreign exchange transactions to be made through its agency.

Exchange restrictions may take various forms, the most common of them being:

Blocked accounts - Blocked accounts refer to bank deposits, securities and other assets held by foreigners in a country which denies them conversion of these into their

home currency. Blocked accounts cannot be converted into the creditor country's currency. Normal used in war periods.

<u>Multiple exchange rates-</u>

They are different exchange rates for different classes and categories of exports and imports. Generally a low rate, i.e., low prices of foreign money in terms of domestic currency, is confined to imports of necessary items having an inelastic demand, while a high penalty rate is fixed for the imports of luxury items. In short, the multiple exchange rates system implies official price discriminatory policy in foreign exchange transactions. The system of multiple exchange rates is a form of discriminatory partial devaluation; it is thus more effective in bringing about the desired effect on the level of trade and thereby, improves the balance of payments.

4. Exchange Clearing Agreements

European countries had adopted this form of exchange control in the Thirties. Under this method, two countries engaged in trade pay to their respective central banks the amounts payable to their respective foreign creditors. The central banks use the money in offsetting the corresponding claims after fixing the value of the currencies by mutual agreement. And, importers have to deposit their payment with the central bank and the can use such money to pay the domestic exporters.

The exchange clearing device can be of help to a country which has little or no foreign exchange reserves and which is more interested in selling than buying. This system also has certain defects as it is applicable in bilateral trades and strong economic economies can exploit weak economic countries.

5. Payment Agreements

Under Payment Agreements, a creditor is paid as soon as information is received by the central bank of the debtor country from the creditor country's central bank that its debtor has discharged his obligation and vice versa. By designing the arrangement for mutual credit facilities, and thus rules out the possibilities delayed payments. Payment Agreements help in maintaining the direct relation between exporters and importers.

Clearing Agreement

It was practised during the period of Great Depression of 1930. Here the two countries provided for the institution of clearing accounts, and the payments for imports and exports are made through clearing of accounts. The payment is made in terms of domestic currencies which are deposited in the clearing accounts of the respective countries. Here neither the importer nor the exporter needs foreign currency. Germany and Switzerland were the first countries to conclude on exchange clearing agreement in 1930.

Transfer Moratoria

Here the payment for imported goods or interest payments on foreign capital are made not immediately, but after the lapse of certain predetermined period as per agreement made between two countries. The importers as well as debtors deposit the payment amount in domestic currency in some authorized banks. Post fixed period, the bank will make the payment to the exporters and foreign creditors in foreign currency.

Standstill Agreement

Germany was the first country to adopt this method after the great depression of 1930. Under this system, the movement of capital is checked between the two countries with suitable measures. Payments are made in installments. Provision is made to convert short term loans into long term loans. Debtor is given adequate time to correct his financial position.

Compensation Agreement

It is a barter agreement under which the two countries should balance their imports and exports with each other. The value of importing country exports to the other country goods should be the same.

6. Gold Policy

Here the country may resort to the manipulation of the buying and selling prices of gold which affects the exchange rate of the country's currency

Indirect Methods of Exchange Control

1. Changes in Interest Rates:

Changes in interest rate tend to influence indirectly the foreign exchange rate. A rise in the interest rate of a country attracts liquid capital and banking funds of foreigners. It will retain the funds in their own country. This tends to increase the demand for local currency and consequently the exchange rate move in its favour and vis-a vis when interest rates fall.

2. Tariffs Duties and Import Quotas:

The most important indirect method is the use of tariffs and import quotas to check the volume of foreign trade. Import duty reduces imports and with it raises the value of home currency relative to foreign currency. While, export duty restricts exports; and the value of home currency falls relative to foreign currencies. In short, when import duties and quotas are imposed, the rate of exchange tends to go up in favour of the controlling country.

3. Export Bounties:

Export bounties of subsidies increase exports. As such the external value of the currency of the subsidy giving country rises.Import duties and export bounties are treated as indirect instruments of exchange control only if they are imposed with the object of conserving the foreign exchange. Otherwise, the fundamental aim of import duty is merely to check imports and that of export bounty is to encourage exports. Exchange control can only be used to prevent the situation from worsening, they are not permanent solutions.

Fixed Exchange Rate system

The Gold standard was the first exchange rate system that was functioning in the period 1879-1934. Currencies of different countries were tied up with gold. This system represented fixed exchange rate. An exchange rate is the price at which one currency is converted into or exchanged for another currency.

A fixed exchange rate is a country's exchange rate regime under which the government or central bank ties the official exchange rate to another country's currency or to the price of gold. Fixed exchange rate system refers to a system in which exchange rate for a currency is fixed by the government.

Fixed exchange rate system was introduced during the last year of the Second World War. This fixed exchange rate under Bretton Woods System of foreign exchange is known as the Bretton Woods System. A group of economists from the United States and Europe met at the Bretton Woods, a town in New Hampshire to devise this system. According to the agreement made there, an international organisation, called International Monetary Fund (IMF) was set up to administer the new fixed exchange rates system. According to the rules framed under the agreement, the USA was to fix a parity or par value for its dollar in terms of gold, whereas other countries were required to fix parities for their currencies in terms of dollars.

Since US dollar was tied to gold, the currencies of other countries with fixed exchange rate with US dollar automatically got pegged (that is, fixed) with a certain gold value. The Government of the USA made a commitment to maintain the convertibility between dollar and gold at a fixed rate, whereas other countries agreed to maintain the convertibility of their currencies with US dollar. Fixed exchange rate system under the Bretton Woods arrangement came under heavy pressure during the sixties and it ultimately collapsed in the early seventies. After 1971, the world's exchange rate became a flexible one or a floating one. The exchange rate that is being followed by the IMF now is known as 'managed floating system, or 'managed flexibility'.

Thus a fixed exchange rate is an exchange rate that does not fluctuate or that changes within a predetermined rate at infrequent intervals. Government or the central

monetary authority intervenes in the foreign exchange market so that exchange rates are kept fixed at a stable rate. The rate at which the currency is fixed is called par value. This par value is allowed to move in a narrow range or 'band' of ± 1 percent.

The fixed or pegged exchange rate can be explained graphically. Let us suppose that India's demand for US goods rises. This increased demand for imports causes an increase in the supply of domestic currency, rupee, in the exchange market to obtain US dollars.

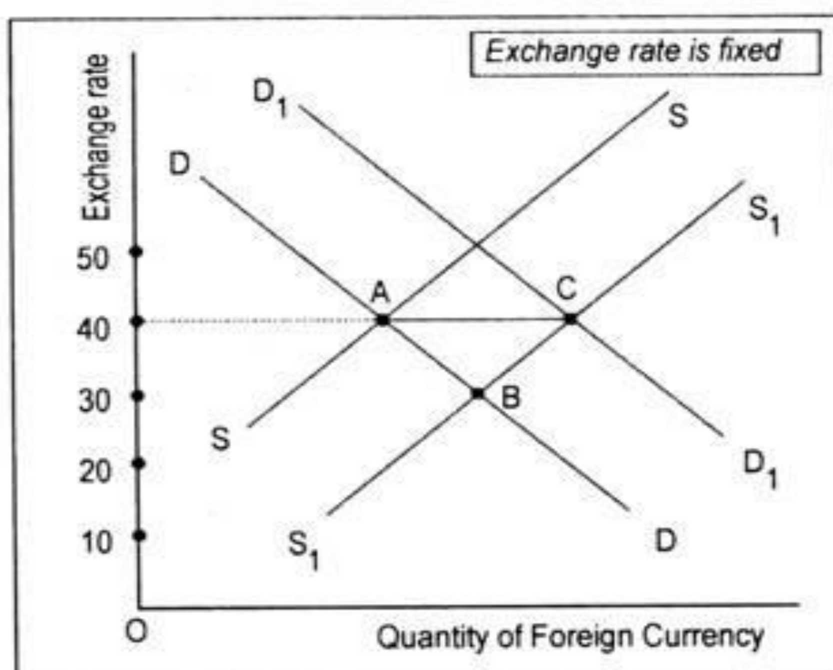


Fig. 5.7: Fixed Exchange Rate Mechanism

DD and SS be the demand and supply curves of dollar. These two curves intersect at point A and the corresponding exchange rate is Rs. 40 = $1. Consequently, the supply curve shifts to S_1S_1 and cuts the demand curve DD at point B. This means a fall in the exchange rate.

To prevent this exchange rate from falling, the Reserve Bank of India will now demand more rupees in exchange for the US dollars. This will restrict the excess supply of rupee and there will be an upward pressure in exchange rate. Demand curve will now shift to DD_1. The end result is the restoration of the old exchange rate at point C. Thus, for the maintenance of fixed exchange rate system, it requires that

foreign exchange reserves are sufficiently available. Whenever a country experiences inadequate foreign currency reserves it won't be able to purchase domestic currency in sufficient quantities. Under these circumstances, the country will devalue its currency. Thus, devaluation means an official reduction in the value of one currency in terms of another currency.

Advantages-

1. Exchange Rate Stability:

Fixed exchange rate system ensures stability in exchange rate. Exchange rate stability is necessary for orderly development of the international economy and rapid growth of world trade. If the exchange rate is unstable or variable, the exporters will not be certain about the price they would receive for the goods to be exported by them; the importers will not be certain about the price and the payments they have to make for their imports. The chief merit of fixed exchange rate system is that it eliminates the possibilities of such uncertainties and associated risks and thereby promotes foreign trade. It is important to note that for the developing countries a stable or fixed exchange rate system has a special advantage as these countries have a large and persistent balance of payment deficits.

2. Promotes Capital Movements:

Another advantage of fixed exchange rate is that it facilitates capital movement by private firms. A stable currency does not involve any uncertainties about capital loss on account of changes in exchange rate. Therefore, fixed exchange rate system would attract foreign capital investments.

3. Prevents capital outflow:

Further, flexible and unstable exchange rates may at times be difficult in economic situation and may encourage flight of capital, but a stable exchange rate ensures that such capital outflow would not occur.

4. Prevents Speculation in foreign exchange market:

Another important merit of fixed exchange rate system is that it does away with speculation in foreign exchange markets. As exchange rate remains unchanged for a long period of time, people expect that such rate would not change in the immediate

future. This then eliminates speculation in the foreign exchange market. Further, as stability in the exchange rate over longish period eliminates the threat of speculation, it discourages the flight of capital.

5. Serves as an anchor against inflation:

Fixed exchange rate system is anti inflationary in character. If exchange rate is allowed to decline, import goods tend to become dearer. High cost import goods then fuels inflation. Such a situation can be prevented by having the exchange rate fixed. Fixed exchange rate system is that it prevents the Government of the countries from adopting inflationary policies. Fixed exchange rate system forces the Governments to achieve price stability by taking effective anti-inflationary measures. This is because in the case of fixed exchange rate, inflation will cause balance of payments deficits and result in loss of international reserves. Therefore, this forces the Government to adopt measures to check inflationary pressures in the economy.

6. Promotes growth of internal money and capital markets:

Another big advantage of the fixed exchange rate system is that it promotes growth of internal money and capital markets. A fixed exchange rate system prevailed for a long time from 1944 to 1971.

The Bretton Woods agreement adopted a fixed exchange rate system because of the above mentioned merits; IMF permitted a change in the exchange rate only in case of fundamental disequilibrium in the balance of payments.

7. Promotes economic integration of the world:

It has also been argued in favour of fixed exchange rate system that it is necessary for achieving economic integration of the world community. This is similar to a single common currency in a country which promotes economic integration of a nation in the sense that it facilitates communication, trade and free movement of finance between different regions of a country. Fixed exchange rates among different currencies is a necessary condition for the purpose of forming economic union between various countries.

Disadvantages –

1. Internal Objectives of Growth and Full Employment Sacrificed:

When countries experiences large and persistent deficits or 'fundamental disequilibrium' in BOP, they are down with the foreign exchange reserves. Countries then opt for devaluation of their currencies and take some internal measures to reduce their deficits. These harsh internal measures tend to contract economies. But the fallouts of these measures are rising prices and rising unemployment. These then reduce economic growth. Thus, fixed exchange rate leads to currency depreciation that results in lower economic growth and higher unemployment coupled with high inflation.

2. Unexpected disturbance and misallocation of resources -the disturbances in the domestic economy will lead to flow of money to trading partners.

3. Heavy burden-he effectiveness of a stable exchange rate, the necessary condition is the adequacy of holding, foreign exchange reserves. Poor developing countries find it difficult to maintain an adequate volume of foreign exchange reserves. Speculators then anticipate currency devaluation in advances if BOP needs to be corrected. Before 1970, fixed exchange rate, in fact, prevailed because of low volume of global trade and, hence, low volume of foreign exchange reserves.

4. Complex system-

It requires highly skilled administrators to operate the system. It is time consuming and uncertain.

5. Uncertainty and speculative activities- tend to get a boost under the fixed exchange rate system. Under a fixed rate system, if a country faces huge BOP deficit then the possibility of speculation gets brightened. If the speculators can guess that such BOP deficit will persist in the days ahead and the authority may go for a cut in foreign exchange rate then these people will be more enthusiastic to sell domestic currencies in the foreign exchange market. The Bretton Woods System of the IMF collapsed in 1971 because of such speculation made with the US dollars.

6. International Competitive Environment By passed:

The continuous changes in international competitive environment do not get reflected under the fixed exchange rate system. Thus, to make the home product more

competitive in the foreign market, what is required is the change in domestic economic policies so that the country's export products get larger foothold in the foreign market. In other words, the fixed exchange rate system fails to gloss over the international competitive environment. Several stopgap measures were taken but uncertainty and confusion in the exchange rate systems continued. In 1973, the world's exchange rate system came to be known as the 'managed floating'- in the sense that currencies tend to float more or less freely in the foreign exchange market.

Flexible exchange rate

Flexible exchange rate system refers to a system in which exchange rate is determined by forces of demand and supply of different currencies in the foreign exchange market.

1. The value of currency is allowed to fluctuate freely according to changes in demand and supply of foreign exchange.

2. There is no official (Government) intervention in the foreign exchange market.

3. Flexible exchange rate is also known as 'Floating Exchange Rate'.

4. The exchange rate is determined by the market, i.e. through interactions of thousands of banks, firms and other institutions seeking to buy and sell currency for purposes of making transactions in foreign exchange.

Expressed graphically the Intersection of demand and the supply curves determines the equilibrium exchange rate and equilibrium quantity of foreign currency. This is called equilibrium in foreign exchange market).

Let us assume that there are two countries—India and USA—and the exchange rate of their currencies, viz., rupee and dollar are to be determined. Presently there is floating or flexible exchange regime in both India and USA. Therefore, the value of currency of each country in terms of the other currency depends upon the demand for and supply of their currencies. Graphically, intersection of demand and supply curves determines the equilibrium exchange rate of foreign currency. At any particular time,

the rate of foreign exchange must be such at which quantity demanded of foreign currency is equal to quantity supplied of that currency.

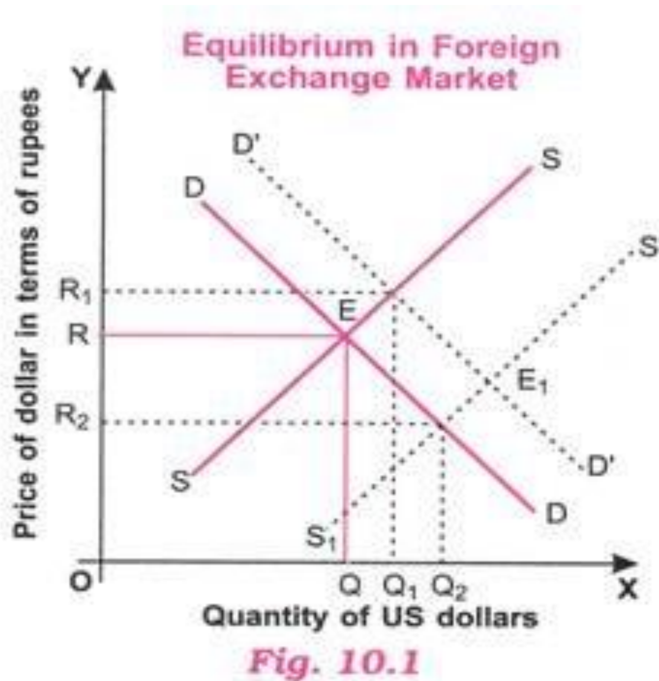


Fig. 10.1

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This is determined at a point where demand for and supply of foreign exchange are equal. Graphically, intersection of demand and supply curves determines the equilibrium exchange rate of foreign currency. At any particular time, the rate of foreign exchange must be such at which quantity demanded of foreign currency is equal to quantity supplied of that currency. It is proved with the help of the following diagram.

The price on the vertical axis is stated in terms of domestic currency (i.e., how many rupees for one US dollar). The horizontal axis measures quantity demanded or supplied of foreign exchange (i.e., dollars).

In this figure, demand curve is downward sloping which shows that less foreign exchange is demanded when exchange rate increases (i.e., inverse relationship). The reason is that rise in the price of foreign exchange (dollar) increases the rupee cost of foreign goods which makes them more expensive. The result is fall in imports and demand for foreign exchange.

The supply curve is upward sloping which implies that supply of foreign exchange increases as the exchange rate increases (i.e., direct relationship). Home country's goods (here Indian goods) become cheaper to foreigners because rupee is depreciating in value. As a result, demand for Indian goods increases. Thus, exports should increase as the exchange rate increases. This will bring greater supply of foreign exchange. Hence, the supply of foreign exchange increases as the exchange rate increases which proves the slope of supply curve.

Demand curve and supply curve of dollars intersect each other at point E which implies that at exchange rate of OR (QE), quantity demanded and supplied are equal (both being equal to OQ). Hence, equilibrium exchange rate is OR and equilibrium quantity is OQ.

Suppose, exchange rate of 1 dollar = Rs 50. An increase in India's demand for US dollars, supply remaining the same, will cause the demand curve DD shift to D'D'. The resulting intersection will be at a higher exchange rate, i.e., exchange rate (price of dollar in terms of rupees) will rise from OR to OR1, (say, 1 dollar = 52 rupees). It shows depreciation of Indian currency (rupees) because more rupees (say, 52 instead of 50) are required to buy 1 US dollar. Thus, depreciation of currency means a fall in the price of home currency.

An increase in supply of US dollar will cause supply curve SS shift to S'S' and as a result exchange rate will fall from OR to OR_2. It indicates appreciation of Indian currency (rupees) because cost of US dollar in terms of rupees has now fallen, say, 1 dollar = Rs 48, i.e., less rupees are required to buy 1 US dollar or now Rs 48 instead of Rs 50 can buy 1 dollar. Thus, appreciation of currency means 'a rise in the price of home currency'.

Advantages –

1. Simple Mechanism: The system of flexible exchange rates operates in an easy, quick and efficient manner in clearing the foreign exchange market. It ensures an automatic adjustment between the forces of demand and supply. The mechanism is simple because it can work efficiently without involving any intervention of the monetary or fiscal authorities in the foreign exchange market.

2. Smooth Adjustments: Under a system of flexible exchange rates, there are smooth and continuous adjustments in the foreign exchange market through appropriate changes in the rates of exchange.

3. No Need of Accommodating Gold or Capital Movements- Unlike the fixed, exchange system where the achievement of BOP equilibrium requires the accommodating gold or capital movements, there is no such necessity under flexible exchange rates. The automatic exchange rate adjustments ensure the maintenance of BOP equilibrium even without the accommodating transactions.

4. No Necessity of Adjustments through Price and Income Changes: In the flexible exchange system can ensure the automatic BOP adjustment through the simple mechanism of freely flexible exchange rates rather than price and income variations.

5. Removal of the Problem of International Liquidity: In a system of flexible exchange rates, a deficit country will simply allow its currency to depreciate and adjust to the BOP equilibrium.

6. Economical: The flexible exchange system is very economical. There is no idle holding of international currency reserves that is so essential under the system of fixed exchange rates. The countries having flexible exchange system can make an optimum use of their entire available exchange reserves.

7. Beneficial for International Trade: the flexibility of exchange rates maintains the rates of exchange at their natural level. Sometimes the problems in international trade under the fixed exchange system arise because there are objections that the currency of a particular country is overvalued or under-valued compared with what should have been its natural rate of exchange.

In such situations the trade is seriously hampered. No such problems, however, can arise in the case of a flexible exchange system because exchange rates are likely to remain at the natural level due to continuous market adjustments. Therefore, the latter can ensure sustained expansion of trade and steady growth of the economy.

8. No Need of International Institutional Arrangements:

In a system of stable exchange rates, there is the necessity of international monetary institutions for borrowing and lending of short- term funds for maintaining exchange

rate parities and for settling BOP problems. The job done by the institutions like IMF can be handled quite efficiently by the freely fluctuating system of exchange rates. Thus the flexible exchange system can dispense with complex international institutional arrangements.

9. Autonomy in Domestic Policies- In case of flexible exchange system, the continuous automatic adjustments in external disequilibria can be possible without resorting to deliberate deflationary or inflationary policies. In this regard, Johnson comments, "The fundamental argument for flexible exchange rates is that they allow countries autonomy with respect to their use of monetary, fiscal and other policy instruments, by automatically ensuring the preservation of external equilibrium."

10. No Necessity of Controls: the flexible exchange system can maintain the exchange values of the currencies at their natural level through market adjustments. The regime, of controls can be dismantled, if reliance is placed upon the flexible exchange rates.

11. No Retaliation: In the past, under the system of fixed exchange rates, the world was witness to competitive and retaliatory devaluation. Such developments and tariff warfare are not likely to exist, at least to some extent, under a system of freely flexible exchange rates.

12. Reinforces Monetary Policy: the free movements of exchange rates can reinforce the domestic monetary policy to make it more effective both during the periods of inflation and recession.

Disadvantages-

1. Misallocation of resources-the market mechanism fails to bring in correct exchange rate, it does not give the right directions at times leading to wrong decisions and misallocation of resources.
2. Official intervention- there never exists a exchange rate system without official intervention. Indirect interventions through domestic monetary and fiscal measures will influence exchange rate.
3. Exchange risk and uncertainty - Susceptibility to uncertainty is greater as soon as exchange rate fluctuates freely. A frequent variation in trade creates a kind of

uncertainty. However, such uncertainty can be largely minimized through forward exchange contracts. The uncertainty involved in this kind of exchange rate may cause trading community to lose some confidence in the system.

4. Adverse effect of speculation- Flexible exchange rate encourages wide speculation since foreign exchange prices are not known in advance as in fixed exchange rate. It is because of speculation there occurs disruptive hot money flows. To put it elaborately, it can be argued that when the exchange rate tends to decline, speculators anticipate that such would continue to decline further and the possibility of the flight of money to another country will brighten. This will then cause a further fall in the exchange rate. Thus, greater the speculation against a currency, the deeper the economic crises.
5. No justification- there will be any justification from government to leave determination of exchange rates, as it often controls rent, wages, and interest rates.
6. Encouragement to inflation- many times it leads to cost push inflation.
7. Breaks the world markets- economists argue that money always cannot serve the primary and secondary function. It leads to division of world markets for goods and services and leads to misallocation of resources.
8. Failure to solve balance of payment deficit of UDCs- these countries suffer from deficit balance of payments as they import goods and services for developmental activities. Their exports are limited and thus this system is not beneficial for these countries.

General Agreement onTrade and Tariff

GATT emerged from the "Ashes of Havana Charter". The General Agreement on Tariffs and Trade (GATT) is a multilateral trade treaty among countries to regulate international trade and tariffs in accordance with specific rules, norms or code of conduct.

The world witnessed a regime of rigorous and extensive trade barriers during 1930's and the period of Second World War. Efforts were made by United States and its allies in Western Europe to create an atmosphere and conditions for liberal trade after the War. At the UN Conference on Trade and Employment held in Havana in 1948, 53 countries adopted a Charter to create ITO. But the Havana Charter could not be ratified by the US Congress, and the proposal was abandoned.

A total of 53 nations signed a charter for its establishment. 23 nations agreed to sign a extensive tariff negotiations for trade concessions in Geneva and led to the emergence of GATT from 1st January 1948. India was also a founder member of GATT. As on 1994 the total members were 118 countries. GATT disappeared on 1st January 1995.

The preamble of the GATT agreement requires the members to enter "into reciprocal and mutually advantageous arrangement directed to the substantial reduction of tariffs and other barriers to trade and the elimination of discriminating treatment in international commerce."

Thus GATT was a multilateral treaty signed by the member countries and was called as "contracting parties". It is neither an organisation nor a court of justice; it is only a multinational treaty that covered 80% of world trade. It was a forum where the contracting parties met from time to time to solve their trade problems. It was a decision making body with a set of rules and code of conduct of international trade and a mechanism for trade liberalisation. It consisted of permanent council of representatives with headquarters at Geneva. Its function was to call international conferences to decide on trade liberalisation on a multilateral basis.

Member Countries

The original 23 GATT members were Australia; Belgium; Brazil; Burma, now called Myanmar; Canada; Ceylon; Chile; China; Cuba; Czechoslovakia, now Czech

Republic and Slovakia; France; India; Lebanon; Luxembourg; Netherlands; New Zealand; Norway; Pakistan; Southern Rhodesia, now Zimbabwe; Syria; South Africa; the United Kingdom and the United States. The membership increased to 100 countries by 1993.

Objectives of GATT-

1. To follow unconditional most favoured nation (MFN) principle.
2. To carry on trade on the principle of non-discriminatory, reciprocity and transparency.
3. To grant protection to domestic industry through tariffs.
4. To liberalise tariff and non tariff measures through multilateral negotiations. The agreement provided for-

a. Multilateral trade negotiations

b. Consultation, conciliation and settlement of disputes, and

c. Waivers to be granted in exceptional cases.

Provisions of GATT

1. Most Favored Nation Clause-

The most important requirement was that each member must confer most favored nation status to every other member. All members must be treated equally when it comes to tariffs. It excluded the special tariffs among members of the British Commonwealth and customs unions. It permitted tariffs if their removal would cause serious injury to domestic producers.

2. GATT prohibited restriction on the number of imports and exports. The exceptions were:

a. The countries could take recourse to them, if it was difficult to adjust balance of payments. In this connection, it was specified that the import quota fixation should be limited to the extent necessary to check a serious fall in the foreign exchange reserves, the import quota fixation should be done after due consultation with the IMF.

b. The LDC's could go for import quota restriction for protecting domestic industries when the use of tariff was not possible or applicable to them. Developed countries agreed to eliminate tariffs on imports of developing countries to boost their economies.

c. For agriculture and fisheries, quota restriction could be applied provided the domestic production was subject to equally restrictive controls.

d. When a foreign country was exporting products at artificially low prices or at the subsidised prices, the affected country was allowed by the GATT to take suitable protective action including the restriction of imports through quota.

e. In the event of a sudden increase in imports, a member country was allowed to take resort to temporary safeguard of import quota restriction for protecting domestic industry.

f. The import quota restrictions could be adopted by a country, if the imports were likely to harm the domestic production control and price support programmes.

g. The countries were allowed to form customs union or free trade areas under Article XXIV of the GATT agreement provided their aim was to promote trade among the constituent countries and not to raise trade barriers against other contracting parties.

The GATT had emphasized upon the need of continuous consultation among the contracting parties on the nature of the BOP problems, alternative corrective measures and the possible effects of quantitative restrictions upon the economies of other contracting parties.

3. Tariff Negotiations and Tariff Reduction:

The GATT contained an entrenched clause that sought to stabilise member countries' tariffs. The Article II of the GATT specified that all concessions granted by contracting parties, as a consequence of negotiations under the GATT, must be entered in a 'Schedule of Concessions'.

It encouraged frequent negotiations among the contracting parties to reduce in a substantial measure the rates of import tariffs. The negotiations for tariff reduction were to be conducted on a reciprocal and mutually advantageous basis, keeping in

consideration the varying needs of the contracting parties. The GATT allowed the use of some measure of tariff protection to the LDC's in view of their special needs of industrial development and also for obtaining revenues. The negotiation procedure concerning tariff reduction under the GATT was bilateral-multilateral.

4. Subsidies and Counter-Veiling Duties:

It was recognised by the GATT that the subsidies were alternative to tariffs. The Tokyo Round of the GATT in 1970's considered it necessary to specify the code of conduct related to subsidies. The industrial countries agreed to a complete ban on export subsidies in the case of manufactured products.The LDC's were exempted from this stipulation. The member countries were required to avoid subsidies on the export of primary products in principle

5. Complaints and Waivers:

Article XXII of the GATT made provision for dealing with any complaints from a contracting party related to the operation of the Agreement. The complainant party could request for consultation with the other contracting party, when the former felt that an action of the latter nullified or impaired the benefits accruing to that country under the Agreement. Article XXV of the GATT laid down the procedure for granting waiver to some contracting parties from the application of the provisions of the GATT. The waivers were not granted unless those were approved by two-thirds of the voting contracting parties.

6. Settlement of Disputes:

The GATT had provided for the machinery for the settlement of any disputes among the contracting parties. Initially the contracting parties were involved into bilateral negotiations for resolving the matter. In case of failure, the matter could be referred to a panel of experts drawn from countries having no direct interest in the matter. The dispute settlement procedure of the GATT rested upon direct consultations, conciliation and third party adjudication. GATT had generally proved successful in resolving disputes among the contracting parties.

GATT Round of talks:

Between the period 1947 and 1995 there were 8 rounds of negotiations between the participating countries. The first 6 rounds were related to curtailing tariff rates, 7th round included the non-tariff obstacles.

The 8th round was entirely different from the previous rounds because it included a number of new subjects for consideration. This 8th round known as "Uruguay Round" became most controversial. The discussions at this round only gave birth to World Trade Organization (WTO).

The First GATT Conference or round of negotiations was held at Geneva in April 1947. This round of negotiations included 123 sets of bilateral negotiations and the results of this conference included-

a. To completly eliminate certain duties and preferences,
b. Scaling down of duty preferences,
c. The binding of duties at the existing levels; and
d. The binding of duty free treatment.

The Second GATT Conference was held in 1949 at Annecy (France). By 1949, 10 more countries had joined the GATT raising the number of contracting parties to 33. In this round of trade negotiations 147 sets of bilateral negotiations converting about 500 items were completed.

The Third GATT Conference was held in 1950-51 at Torquay (England). Six new countries had joined the agreement by then. OF the total 400 bilateral trade negotiations, only 147 could be completed.

The Fourth GATT Conference was held in 1955-56 at Geneva (Switzerland). At this conference, although the United States granted concessions in respect of its countries imports to the tune of 900 million dollars and secured concessions on exports amounting to 400 million dollars, yet it was not a success. No country was satisfied and several contracting parties had withdrawn from the negotiations.

The Fifth GATT Conference was held in 1960-61 again at Geneva. At this conference, the LDC's pointed out that the limit to which they could extend concessions on the basis of the principle of reciprocity has been already crossed and they were no more in a position to follow that principle. They also pointed out that the

developed countries had avoided negotiations on products which were of vital interest to them.

The Sixth GATT Conference (1963-67), known as the Kennedy Round, was held at Geneva. 54 countries participated in this round of trade negotiations. The results of Kennedy Round included the tariff reduction by the advanced countries like the U.S.A, the EEC countries, Japan and Canada on an average to the extent of 35 percent.

The Seventh GATT Conference known as the Tokyo Round (1973-79) was held at Tokyo. This conference deliberated upon the issues including tariff reduction, removal or reduction of non-tariff barriers, coordinated scaling down of all trade barriers in selected sectors, trade liberalization in agriculture, multilateral system of safeguards, the tropical products and special interests of the LDC's.

The Eight rounds-The Trade Ministers of the GATT nations met at Punta del Este, Uruguay in Sept. 1986. The decisions taken by them paved the way for the Uruguay Round of multilateral trade negotiations which were launched in October 1986 in Geneva. Three prominent bodies were involved in the conduct of these negotiations. They included the Trade Negotiations Committee (TNC) to oversee the entire Round, the Group of Negotiations on Goods (GNG) to deal with negotiations related to commodities and the Group of Negotiations on Services.

The issues at the Uruguay Round:

1. Tariff Reduction
2. Non-Tariff Barriers
3. Trade in Services
4. Intellectual Property Rights
5. Foreign Investments
6. Agriculture
7. Textiles
8. Settlement of Disputes

Role of GATT in the Dunkel Draft

Eighth Round of GATT negotiation was originally thought to last for four years, but the complex issues involved in it led to the conclusion of negotiations at 15th December, 1993.

Arthur Dunkel, the Director- General of the GATT since 1980, finalized a nearly 500 page draft called as Dunkel Draft, on his own and circulated it among the member countries in December 1991 on a take-it or leave-it basis. The draft dealt with all the issues under discussion in the Uruguay Round including services, intellectual property rights, sui generis protection in the field of biotechnology, farm subsidies, free trade in food grains, buffer stocks and public distribution system, textiles and clothing, foreign investment, research and development, tariff and non-tariff restrictions and settlement of disputes. Dunkel wanted to set up the agreement by April , but the row over farm subsidies between the U.S.A. and the European Community (EC) prevented any agreement. Trade Negotiations Committee passed a resolution on 31st August, 1993 to conclude Uruguay rounds talks by 15th December, 1993.

The wrangling continued between the EC, the U.S.A. and Japan until the United States enforced deadline of December 15, 1993, when the final agreement was reached after effecting several modifications in the Dunkel Draft from over a period of 7 years Uruguay round negotiations. On 15th April, 1994, 123 Ministers of member countries ratified the results of Uruguay rounds at Markeesh.

The key features of the Uruguay Round Final Settlement are:

a. An agreement on agriculture to increase market access, reduce export subsidies and tariffs and eliminate non-tariff barriers.
b. An agreement on textiles that emphasizes in particular the phased removal of quota restrictions.
c. Agreements to reduce most import tariffs on industrial products by one third over the next five years; tariffs on some products, including pulp and paper, will be eliminated completely in major developed country markets over the next 8-10 years.
d. A commitment to increase the proportion of import tariffs on industrial products that are bound, with developed countries (including transition economies)

agreeing to bind virtually all tariffs and developing countries binding 65% of tariffs; one of the largest increases in tariff bindings in developed country markets will be forest products.

e. Agreements on secured market access and trade rules for services, trade-related intellectual property rights and trade-related investment measures.

f. Improved trade rules controlling the use of subsidies, countervailing duties, anti-dumping measures and safeguards.

g. Establishment of the WTO, which will oversee all Uruguay Round agreements, administer the GATT Trade Policy Review Mechanism and provide a permanent forum for discussion of new trade issues, such as trade impacts on the environment, international competition policy and trade in telecommunications.

Failures of GATT

GATT was evolved to promote free multilateral trade in the world based on specified norms of trade behaviour applicable to all the contracting parties, but the functioning of the GATT exposed several deficiencies:

1. No Enforcement Authority

It had attempted to prescribe an international code of conduct in the sphere of trade. But there was no enforcement authority to oversee the compliance of GATT regulations by contracting parties and to settle their trade disputes.

2. Problems in the Formulation of General Rules

The members of GATT were diversifying in nature, they had varied in economic and political motives and countries were also at different stages of development. These reasons created difficulty in framing and implementing uniform general rules of conduct concerning trade, tariffs and payment.

3. Little Benefits for the LDC’s

Though the majority of the members of the GATT were in the froe LDC’s, yet GATT had provided little benefit to these countries. The GATT failed to assure just terms of trade for them. They could not secure easy and liberal access to the markets

of developed countries. The GATT did not permit any compensation to the less developed countries on account of injury to their economies caused by the actions of developed countries and such countries.

4. Quantitative Trade Restrictions

The GATT had certainly ensured the sealing down of tariff structure but the quantitative trade restrictions remained for a long time outside the GATT ambit. Consequently, the developed countries had used with impunity the quantitative trade restrictions such, as import quotas, export subsidies, voluntary export restraints, and health and safety regulation.

5. Non-Representative Body

The membership of the GATT had progressively expanded over the years. But for a long time, the East European countries of erstwhile Soviet block and China remained outside the GATT. It was therefore criticized as a non-representative body.

6. The ‘Escape’ and ‘Safeguard’ Clauses

The contracting parties could adopt protective measures in times of severe balance of payments problems. Though these clauses were supposed to be temporary measures but in practice had become almost permanent feature of the international trading system.

7. Free Trade Area or Customs Union

The Article XXIV of the GATT made provision for the member countries could organise themselves into free trade areas or customs unions. The strong regional trading block such as European Union (EU), North American Free Trade Association (NAFTA), Association of South East Asian Nations (ASEAN) and Asian Pacific Economic Co-operation (APEC) emerged. They have created serious distortions in the world trade. They have undermined the basic GATT principles of non-discrimination and reciprocity and weakened the GATT.

8. Commodity to Commodity Based Negotiations

The practice of commodity to commodity based negotiations invariably benefitted the countries having stronger bargaining power vis-a-vis others.

9. Neglect of Agriculture

Agriculture was outside the purview of GATT. The contracting parties continued to follow the farm support policies resulting in food surpluses that could be exported only with the help of export subsidies. It was only at Kennedy and Tokyo Rounds that the agreements could be arrived at about some categories of primary products. The issue of farm subsidies by European Union (EU) had brought the Uruguay negotiations almost on the verge of collapse in 1992. Even in December 1993 agreement, there was the provision only of some scaling down of the export subsidies on farm products.

The final chapter of the trade negotiations under GATT was the Uruguay round. GATT was not able to deal with world trade mainly in the areas of agriculture, loopholes in the multilateral system, and efforts at liberalizing trade met with little success. In the textiles and clothing sector, an exception to GATT's normal disciplines was negotiated in the 1960s and early 1970s, leading to the Multifibre Arrangement. Even GATT's dispute settlement systems were causing concern.

The Uruguay round negotiations lasted for about seven and a half years, all issues related to trade were discussed in these negotiations, previous GATT articles were reviewed and most importantly the Final Act concluding the Uruguay Round and officially establishing the WTO regime was signed during the April 1994 ministerial meeting at Marrakesh, Morocco, and hence is known as the Marrakesh Agreement. The Marrakesh agreement was the document that gave the legal sanction to the establishment of the World Trade Organisation on January 1, 1995

World Trade Organisation

Global commercial policy led to the emergence of WTO mainly to promote free trade among different countries.The Uruguay round of talks that concluded on April 15th 1994 at Marrkaesh, Morocco led to emergence of WTO. This transformation turned GATT from a trade accord into a permanent membership organisation, responsible for governing the conduct of trade relations among its members, GATT obligations remain at the core of the WTO.

India along with 123 countries along with EC countries signed the final Act, led to emergence of this trade organisation on 1/1/1995.

It is the successor of GATT.

It is a permanent body.

It has a legal status and enjoys privileges and immunities along with IMF and IBRD.

There were 77 countries in WTO as on 1/1/1995. It is a multilateral trading system — WTO's agreements are negotiated and signed by a large majority of the world's trading nations, and ratified in their parliaments. These agreements are the legal ground-rules for international commerce. They are contracts, guaranteeing member countries important trade rights. They also bind governments to keep their trade policies within agreed limits to everybody's benefit. The main objective of WTO is to establish a Multilateral trading system to promote free and fair trade among the trading nations. Dunkel Draft on which WTO was found emphasized for liberalisation of trade based on comparative costs. It made provision for trade for both goods and services. There are 164 members from both developed and underdeveloped countries.

WTO – Status

It is a legal and institutional foundation for multilateral trade. It is a permanent organisation created by international treaty ratified by the government and state legislatures of member countries. It consists of a document on General agreement consisting of 38 article code and 500 pages of specific agreements reached at Uruguay round talks.

The first Director General WTO Peter Sutherland has said, “The WTO binds nations in a global co-operative endeavour to raise incomes and create good jobs through fair and open trade.”

The Preamble of WTO:

The Preamble of the World Trade Organisation (WTO) states that “there is a need for positive efforts to ensure that developing countries and especially the least developed among them, secure a share in the growth of international trade commensurate with the needs of their economic development.”

The preamble of the WTO, while reiterating the objectives of the GATT, viz., raising standards of income, ensuring full employment and extension of trade, extends these objectives to services.

Objectives:

The important objectives of WTO are:

1. To improve the standard of living of people in the member countries.

2. To ensure full employment and broad increase in effective demand.

3. To enlarge production and trade of goods.

4. To increase the trade of services.

5. To ensure optimum utilization of world resources.

6. To protect the environment.

7. To accept the concept of sustainable development

Functions:

The main functions of WTO are:

1. To implement rules and provisions related to trade policy review mechanism.

2. To provide a platform to member countries to decide future strategies related to trade and tariff.

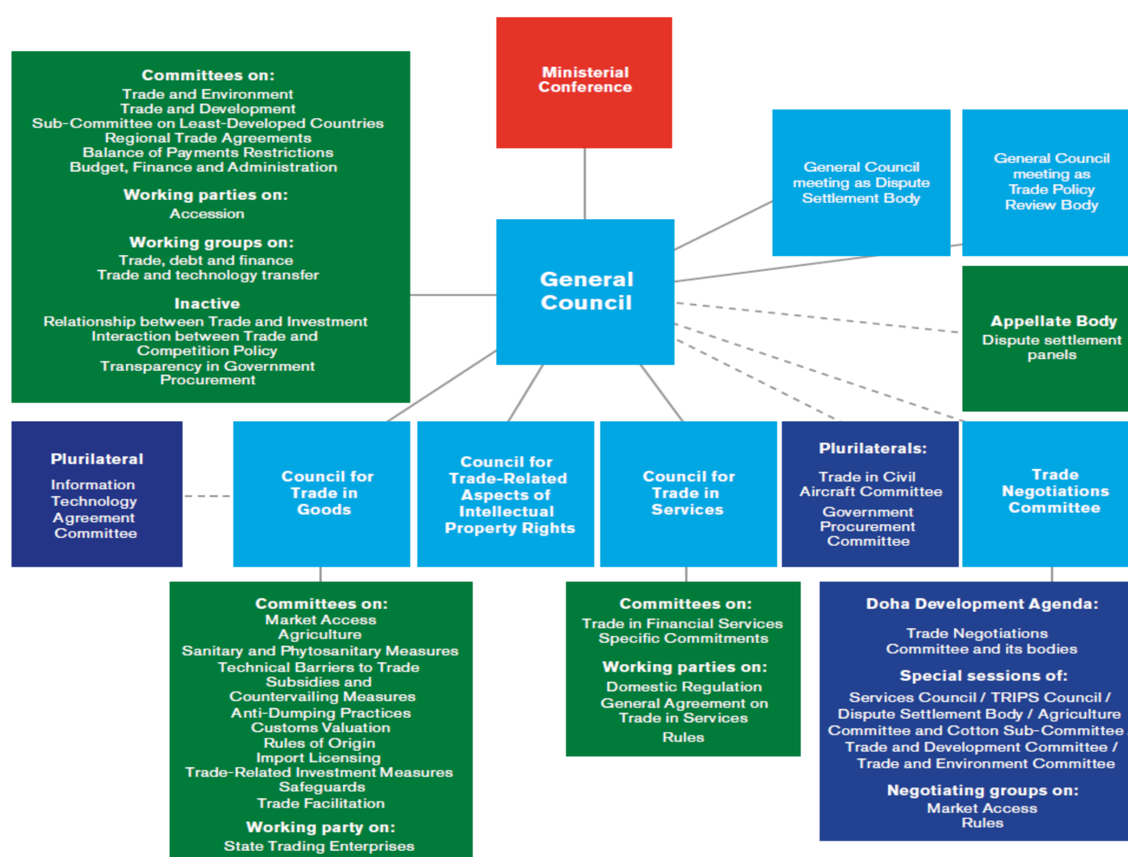
3. To provide facilities for implementation, administration and operation of multilateral and bilateral agreements of the world trade.

4. To administer the rules and processes related to dispute settlement.

5. To ensure the optimum use of world resources.

6. To assist international organizations such as, IMF and IBRD for establishing coherence in Universal Economic Policy determination.

Structure



The WTO’s top level decision-making body is the Ministerial Conferences which meets at least once in every two years. Below this is the General Council (normally ambassadors and heads of delegation in Geneva, but sometimes officials sent from members’ capitals) which meets several times a year in the Geneva headquarters.

The General Council also meets as the Trade Policy Review Body and the Disputes Settlement Body. In the next level, the Goods Council, Services Council and

Intellectual Property (TRIPs) Council report to the General Council. Numerous specialized committees, working groups and working parties deal with the individual agreements and other areas such as, the environment, development, membership applications and regional trade agreements

The WTO secretariat, based in Geneva, has around 600 staff and is headed by a Director-General. Director-General is appointed for 4 years term by Ministerial council. He has 4 Deputies from different member states.

The Guiding Fundamental Principles and Features of WTO

These principles represent the salient features of WTO-

1. Non-Discrimination

All trading partners will be granted the most favoured nation (MFN) status, that is, each member state of WTO will treat every other member state equally as the most favoured nation doing trade. Foreign goods, services, trade marks, patents and copyrights shall be given the same treatment as is given to nationals of a country.

2. Free Trade

The objective of WTO is to promote free trade among nations through negotiations. WTO has worked for progressive liberalisation of trade through reduction in tariffs and removal of quantitative restrictions on imports by member countries.

3. Stability in the Trading System:

Under WTO agreements member states are committed not to raise tariff and non tariff trade barriers arbitrarily. This provides stability and predictability to the trading system.

4. Promotion of Fair Competition:

WTO objective is to promote multilateral trading system through transparent, fair and undistorted competition among the various countries. WTO agreement provides for discouraging unfair competitive practices such as export subsidies and dumping.

5. Special Concern for Developing Countries

WTO has shown special concern for the developing countries as it has given them more time to adjust to agreements under it and also some special privileges.

6. Market Access Commitment:

WTO agreements which seek to establish multilateral trading system require the member countries to undertake market access commitment on reciprocity basis.

7. Decision at the Ministerial Level Meeting:

Another important feature of WTO agreement is that it has upgraded decision making at the ministerial level. Important decisions regarding trade related matters are to be taken at the Ministerial level meetings. Ministerial level meetings have now been incorporated in the legal structure of WTO.

8. Wider Range of Issues

WTO is that it will deal with not only issues and disputes relating to trade in goods but also the whole range of issues concerning trade in services and intellectual property rights.

9. Multilateral Trading System:

The most important features of WTO is that it seeks to establish just and fair multilateral system of international trade wherein the developed countries, the developing countries, and the least developing countries all have equal opportunities for market access for their products in foreign countries and wherein discriminatory trade barriers and unjust Government support to exports by different countries have been eliminated.

WTO Agreements

The WTO's rule and the agreements are the result of negotiations between the members. The current sets were the outcome to the 1986-93 Uruguay Round negotiations which included a major revision of the original General Agreement on Tariffs and Trade.

1. Multilateral trade agreements on Trade in Goods.

2. General Agreement on Trade in Services
3. Trade Related aspects of Intellectual Property Rights
4. Understanding the rules and procedures governing settlement of Disputes.
5. Plurilateral trade Agreements
6. Trade Policy review Mechanism.

Multilateral trade agreements on Trade in Goods- it includes GATT 1947 amendments.

Article II - Schedules of Concessions spells on the agreement is to record the national schedules "other duties or charges" levied in addition to the recorded tariff and to bind them at the levels prevailing at the date established in the Uruguay Round Protocol.

Understanding on the Interpretation of Article XVII speaks about the provisions for State-trading Enterprises. The agreement specifies on increasing surveillance of their activities through stronger notification and review procedures.

Balance of payments provisions.

In this agreement, the contracting parties imposing restrictions for balance of payments purposes should do so in the least trade disruptive manner and should favour price-based measures, like import surcharges and import deposits, rather than quantitative restrictions. The agreement also enumerates the procedures for consultations by the GATT Balance of Payments Committee and as well as for notification of BOP measures.

The Interpretation of Article XXIV -Customs Unions and Free Trade Areas

The agreement clarify's and reinforces the criteria and procedures for the review of new or enlarged customs unions or freetrade areas and for the evaluation of their effects on third parties. The agreement also clarifies on the procedure to be followed for achieving any necessary compensatory adjustment in the event of contracting parties forming a customs union seeking to increase a bound tariff.

Understanding on the Interpretation of Article XXVIII-Modification of GATT Schedules.

The agreement is for new procedures for the negotiation of compensation when tariff bindings are modified or withdrawn, including the creation of a new negotiating right for the country for which the product in question accounts for the highest proportion of its exports. This is intended to increase the ability of smaller and developing countries to participate in negotiations.

Agreement on Agriculture

The Agreement on Agriculture makes itself on the concessions and commitments. The members are to undertake on market access, domestic support and export subsidies; the Agreement on Sanitary and Phytosanitary Measures; and the Ministerial Decision concerning Least-Developed and Net Food-Importing Developing countries.

The agricultural package provides for commitments in the area of market access, domestic support and export competition. These include provisions that encourage the use of less trade-distorting domestic support policies to maintain the rural economy, that allow actions to be taken to ease any adjustment burden, and also the introduction of tightly prescribed provisions that allow some flexibility in the implementation of commitments. Specific concerns of developing countries have been addressed including the concerns of net-food importing countries and least-developed countries.

In the area of **market access**, non-tariff border measures are replaced by tariffs that provide substantially the same level of protection.

Tariffs resulting from this “tariffication” process, as well as other tariffs on agricultural products, are to be reduced by an average 36 per cent in the case of developed countries and 24 per cent in the case of developing countries, with minimum reductions for each tariff line being required. Reductions are to be undertaken over six years in the case of developed countries and over ten years in the case of developing countries. Least-developed countries are not required to reduce their tariffs.

Members are required to reduce the value of mainly direct *export subsidies* to a level 36 per cent below the 1986-90 base period level over the six-year implementation period, and the quantity of subsidised exports by 21 per cent over the same period. In case of developing countries, the reductions are two-thirds those of developed countries over a ten-year period (with no reductions applying to the least-developed countries) and subject to certain conditions, there are no commitments on subsidies to reduce the costs of marketing exports of agricultural products or internal transport and freight charges on export shipments.

In addition to the green box policies, other policies need not be included in the Total Measurement of Support (Total AMS) reduction commitments. These policies are direct payments under production-limiting programmes, certain government assistance measures to encourage agricultural and rural development in developing countries and other support which makes up only a low proportion (5 per cent in the case of developed countries and 10 per cent in the case of developing countries) of the value of total agricultural production. The subsidies are to be calculated at the international price for the commodity.

Green Box -Subsidies with no, or minimally trade distorting, effect have been put in this box. These are not subject to any reduction commitments. It includes all government service programmes.

Blue Box -It contains those subsidies whose continuation is subject to a limitation on production.

White Box- It includes such subsidy practices in developing countries like investment's subsides, agricultural input subsidies available to low income or resource for poor farmers and measures to encourage diversification form growing illicit narcotic crops.

Sanitary and Phytosanitary measures

The application of sanitary and phytosanitary measures concern food safety, animal and plant health regulations. The agreement recognises that governments have the right to take sanitary and phytosanitary measures but that they should be applied only to the extent necessary to protect human, animal or plant life or health and should not arbitrarily or unjustifiably discriminate between Members where identical

or similar conditions prevail. The Agreement spells out procedures and criteria for the assessment of risk and the determination of appropriate levels of sanitary or phytosanitary protection.

Food stocking and Food Aid

The special Decision sets out objectives with regard to the provision of food aid, the provision of basic foodstuffs in full grant form and aid for agricultural development. It also refers to the possibility of assistance from the International Monetary Fund and the World Bank with respect to the short-term financing of commercial food imports. A committee on agriculture has been established to monitor and review the implementations of the agricultural agreements.

Agreement on Textiles and Clothing

The object of this negotiation is to secure the eventual integration of the textiles and clothing sector — where much of the trade is currently subject to bilateral quotas negotiated under the Multifibre Arrangement (MFA) — into the GATT on the basis of strengthened GATT rules and disciplines.

The integration of the sector into the GATT would take place as follows:

Phase 1 on 1 January 1995; each party would integrate into the GATT products from the specific list in the Agreement which accounted for not less than 16 per cent of its total volume of imports in 1990.

Phase 2, on 1 January 1998, products which accounted for not less than 17 per cent of imports would be integrated.

Phase 3 on 1 January 2002, products which accounted for not less than 18 per cent of 1990 imports would be integrated. All remaining products would be integrated at the end of the transition period on 1 January 2005 in 4th phase.

All MFA restrictions in place on 31 December 1994 would be carried over into the new agreement and maintained until such time as the restrictions are removed or the products integrated into GATT.

The agreement also stipulates that, as part of the integration process, all members shall take such actions in the area of textiles and clothing as may be necessary to

abide by GATT rules and disciplines so as to improve market access, ensure the application of policies relating to fair and equitable trading conditions, and avoid discrimination against imports when taking measures for general trade policy reasons. Integration means trade in tops and yarns, fabrics, made-up textiles and clothing governed by GATT.

Agreement on Technical Barriers to Trade (TBT)

This agreement will extend and clarify the Agreement on Technical Barriers to Trade reached in the Tokyo Round. It seeks to ensure that technical negotiations and standards, and testing and certification procedures, do not create unnecessary obstacles to trade. However, it recognizes that countries have the right to establish protection, at levels they consider appropriate, for example for human, animal or plant life or health or the environment. A Code of Good Practice for the Preparation, Adoption and Application of Standards by standardizing bodies, is included in to the agreement.

The objective of its agreement is to ensure that the technical regulations, standards, testing and certification procedures do not create unnecessary obstacles to trade. It visualizes that mandatory product standards do not create such barriers if based on internationally agreed standards. It also recognizes that countries have a right to establish protection, at levels they consider appropriate and that countries should not be prevented from taking such measures as are necessary to ensure that those levels of protection are met.

Technical regulations and standards cover product characteristics, process and production characteristics, terminology and symbols and packaging and labeling requirements as they apply to the products.

The TBT encourages countries to use international standards where appropriate, but does not require change in the level of protection as a result of standardization.

Agreement on Trade Related Aspects of Investment Measures

The agreement recognizes that certain investment measures restrict and distort trade. It provides that no contracting party shall apply any TRIM inconsistent with Articles III (national treatment) and XI (prohibition of quantitative restrictions) of the GATT.

The agreement requires mandatory notification of all non-conforming TRIMs and their elimination within two years for developed countries, within five years for developing countries and within seven years for least-developed countries. It establishes a Committee on TRIMs which will, among other things, monitor the implementation of these commitments.

The measures are confined for quantitative restrictions and national treatment. It is related in the areas of investments in identified areas, extent of foreign investments, export obligations. It stressed for foreign investment companies to be treated on par with national companies.

Agreement on Anti-dumping

Article VI of the GATT provides for the right of contracting parties to apply anti-dumping measures i.e. measures against imports of a product at an export price below its "normal value.It has detailed the rules governing the application of such measures in Anti-dumping Agreement concluded at the end of the Tokyo Round.

The revised Agreement provides for greater clarity and more detailed rules in relation to the method of determining that a product is dumped, the criteria to be taken into account in a determination that dumped imports cause injury to a domestic industry, the procedures to be followed in initiating and conducting anti dumping investigations, and the implementation and duration of anti dumping measures. In addition, the new agreement clarifies the role of dispute settlement panels in disputes relating to anti dumping actions taken by domestic authorities.

The objective of this agreement is to provide the right to the contracting parties to apply for anti dumping measures. These measures are against the imports of a product, if such imports cause any injury to a domestic industry in the territory of the contracting party. The ADA allows member nations to apply antidumping measures on a unilateral basis after elaborate investigations.

The anti-dumping investigation determines whether:

i. An imported product has been dumped;

ii. It has caused material injury to the domestic industry of a like product; and

iii. There is a causal link between dumped imports and the injury.

Agreement on Subsidies and Countervailing Measures

The agreement contains a definition of subsidy and introduces the concept of a "specific" subsidy - for the most part, it is a subsidy available only to an enterprise or industry or group of enterprises or industries within the jurisdiction of the authority granting the subsidy. The agreement establishes three categories of subsidies.

The following subsidies to be are

1. Prohibited subsidies – are subsidies with high trade distorting effects

2. Actionable subsidies-are actionable by trading partner if its interest is adversely affected.

3. Non-actionable subsidies- are not specific subsidies to an enterprise or an industry or a group of industries.

General agreement on trade in services

The Services Agreement which forms part of the Final Act rests on three pillars. The first is a Framework Agreement containing basic obligations which apply to all member countries.

The second concerns national schedules of commitments containing specific further national commitments which will be the subject of a continuing process of liberalization.

The third is a number of annexes addressing the special situations of individual in services sectors.

A basic most favoured nation (m.f.n.) obligation states that each party "shall accord immediately and unconditionally to services and service providers of any other Party, treatment no less favourable than that it accords to like services and service providers of any other country". However, it is recognized that m.f.n. treatment may not be possible for every service activity and, therefore, it is envisaged that parties may indicate specific m.f.n. exemptions. Conditions for such exemptions are included as an annex and provide for reviews after five years and a normal limitation of 10 years

on their duration. Transparency requirements include publication of all relevant laws and regulations.

TRIPS Agreement

The areas of intellectual property that it covers are:

1. Copyright and related rights (i.e. the rights of performers, producers of sound recordings and broadcasting organizations);

2. Trademarks including service marks;

3. Geographical indicators including appellations of origin;

4. Industrial designs;

5. Patents including the protection of new varieties of plants;

6. The layout designs of integrated circuits; and

7. Undisclosed information including trade secrets and test data.

1. Copyright

It was recognized that the Berne Convention provided adequate basicstandards of copyright protection for the literary and artistic works. The term of protection is at least 50 years for performers and producers of phonograms, and 20 years for broadcasting organizations

2. Trademarks

Any sign , or any combination of signs, capable of distinguishing the goods and services of one undertaking from those of other undertakings constitutes trademark.The owners of registered trademark has the exclusive right to prevent all third parties to use the similar and identical goods and services without the consent of the Owner.

3. Geographical indicators

It refers to the indentity of a goods as a originating in the territory of a member, or a region or locality in that territory where a given quality or reputation of good is essentially attributed to its geographical origin. Member are required to provide legal means for interested parties to prevent use of any indication which misleads the consumer as to the origin of goods and any use which could constitute unfair competition.

4. Industrial design

They are protected for 10 years. The owners can prevent the manufacture, sale or importation of articles bearing or embodying designs which is a copy of the protected design for commercial purposes.

5. Patents

Patents shalll be available for inventions, whether products or processes in all fields of technology provided they are new with inventive step and are capable of industrial application.Patent owners shall have rights to assign or transfer by succession the patent and to conclude licensing contracts. The agreement requires 20 year patent protection.

6. Integrated circuits

The agreement provides protection to the layout designs of integrated circuits for a period of 10 years. This protection shall lapse of 15 years.

7. Trade secrets

Trade secrets and know-how having commercial values shall be protected against breach of confidence and other acts. Test data submitted to government to obtain marketing approval for pharmaceuticals or agricultural chemicals shall be protected against unfair commercial use. This agreement refers to the controls of anti-competitive practices in contractual property rights.

Trade Policy Review Mechanism

The Trade Policy Review Mechanism (TPRM) was introduced into GATT in 1989 following the Mid Term Review of the Uruguay Round. The mechanism was confirmed as an integral part of the WTO in Annex 3 of the Marrakesh Agreement

establishing the World Trade Organization. Before 1995, trade policy reviews were restricted to trade in goods.

In conformity with WTO rules, since 1 January 1995 reviews have also covered new like trade in services and intellectual property rights. An agreement confirms the Trade Policy Review Mechanism, introduced at the time of the mid term Review, and encourages greater transparency in national trade policy making. It carries out review of trade policies and practices for smooth functioning of multilateral trade and plurilateral trade. To meet this requirement it envisaged for establishment of TBRP.

The purpose of the TPRM is to "contribute to improved adherence by all Members to rules, disciplines and commitments made under the Multilateral Trade Agreements and, where applicable, the Plurilateral Trade Agreements, and hence to the smoother functioning of the multilateral trading system, by achieving greater transparency in, and understanding of, the trade policies and practices of Members".

All WTO Members are subject to review under the TPRM. The Annex mandates that the four Members with the largest shares of world trade (currently the European Union, the United States, Japan and China) be reviewed each two years, the next 16 are reviewed each four years, and others be reviewed each six years. A longer period may be fixed for least-developed country Members. As a result of an amendment to Annex 3 in July 2017, these review cycles will be three, five and seven years respectively, beginning on 1 January 2019.

The reviews are conducted by the Trade Policy Review Body (TPRB)on the basis of a statement by the Member under review and a report prepared by economists in the Secretariat's Trade Policy Review Division. The TPRB's debate is stimulated by a discussion, selected beforehand for this purpose.

Plurilateral Trade agreements

It consists of agreement on Trade in Civil craft, on government procurement, international diary agreement and international bovine meat agreement.

Fair trade in civil aircraft- The Agreement on Trade in Civil Aircraft entered into force on 1 January 1980. It now has 32 signatories.

The agreement eliminates import duties on all aircraft, other than military aircraft, as well as on all other products covered by the agreement - civil aircraft engines and their parts and components, all components and sub-assemblies of civil aircraft, and flight simulators and their parts and components. It contains disciplines on government directed procurement of civil aircraft and inducements to purchase, as well as on government financial support for the civil aircraft sector.

Government procurement –it was first negotiated during the Tokyo Round and entered into force on 1 January 1981.

It is designed to make laws, regulations, procedures and practices regarding government procurement more transparent and to ensure they do not discriminate against foreign products or suppliers.

During the Uruguay Round and later in parallel with the Doha Round, the Agreement was revised twice through negotiations among its signatories. Its latest version came into force on 6 April 2014.

The Agreement has two elements - general rules and obligations, and schedules of each participant's entities, whose procurements of listed goods, services and construction services are subject to the agreement, if they exceed the threshold levels indicated in the schedules.

The general rules and obligations mainly concern tendering procedures. They have evolved through different versions of the Agreement to enhance fair and non discriminatory conditions of international competition and to reflect new developments in the procurement field, e.g. the wide use of electronic means in tendering.

At present, the Agreement has 20 parties comprising 48 WTO members. Another 35 WTO members participate in the GPA Committee as observers.

Dairy and bovine meat agreements: ended in 1997

The International Dairy Agreement and International Bovine Meat Agreement were scrapped at the end of 1997. Countries that had signed the agreements decided that the sectors were better handled under the Agriculture and Sanitary and Phytosanitary agreements.

Rules and Procedures Governing the Settlement of Dispute

The Dispute settlement understanding is the central pillar of the multilateral trading system of the World Trade Organisation framed as a legal text containing the rules for dispute settlement in the WTO. The current dispute settlement system of WTO was created during Uruguay Round.

It is embodied in the Understanding on Rules and Procedures Governing the Settlement of Disputes, commonly referred to as the Dispute Settlement Understanding and abbreviated "DSU". The dispute settlement system of the GATT is generally considered to be one of the cornerstones of the multilateral trade order.

The DSB emphasizes the importance of consultations in securing dispute resolution, requiring a Member to enter into consultations within 30 days of a request for consultations from another Member. If after 60 days from the request for consultations there is no settlement, the complaining party may request the establishment of a panel. Where consultations are denied, the complaining party may move directly to request a panel. The parties may voluntarily agree to follow alternative means of dispute settlement, including good offices, conciliation, mediation and arbitration.

Duration of a Dispute Settlement procedure

These approximate periods for each stage of a dispute settlement procedure are target figures. The agreement is flexible. In addition, the countries can settle their dispute themselves at any stage.

1. 60 days: Consultations, mediation, etc.
2. 45 days: Panel set up and panellists appointed
3. 6 months: Final panel report to parties
4. 3 weeks: Final panel report to WTO members
5. 60 days: Dispute Settlement Body adopts report

The participants in the dispute settlement system are the Member governments of the WTO), which can take part either as parties or as third parties. The WTO Secretariat, WTO observer countries, other international organizations, and regional or local governments are not entitled to initiate dispute settlement proceedings in the WTO.

The Dispute Settlement Understanding (DSU) sometimes refers to the Member bringing the dispute as the “complaining party” or the “complainant”

Further provisions set out rules for compensation or the suspension of concessions in the event of non implementation.Within a specified time frame, parties can enter into negotiations to agree on mutually acceptable compensation. Where this has not been agreed, a party to the dispute may request authorization of the DSB to suspend concessions or other obligations to the other party concerned. The DSB will grant such authorization within 30 days of the expiry of the agreed time frame for implementation.

WTO and India

India is a founder member of the General Agreement on Tariffs and Trade 1947 and its successor, the World Trade Organization (WTO), which came into effect on 1.1.95 after the conclusion of the Uruguay Round (UR) of Multilateral Trade Negotiations.

India has joined the WTO in order to integrate the domestic economy with the world economy. India's participation in an increasingly rule based system in the governance of international trade and to ensure more stability and predictability, which ultimately would lead to more trade. India as a member of WTO automatically avails of MFN and national treatment for its exports to all WTO Members.

India would benefits from WTO provisions-

1. Through reduction of tariff rates on raw materials components and, capital goods, it would be able to import more for meeting domestic developmental requirements.

2. India is a founder member of WTO with wide membership of the organisation, thus it expected greater market access in several countries without any bilateral trade agreements.

3. Advanced technology would be obtained at low cost.

4. With DSB for resolving trade disputes under WTO, India would be in a better position to get quick redressal of the trade disputes, if any.

5. The scope of creating more jobs would be expanded.

6. The Indian exporters have deficient market information, this would be removed by the help of WTO and country could get wider market information, and

7. Due to increasing competition and exposure to the competitive edge, it may lead to productivity of Indian industry.

India's commitment to WTO

The Government of India made the following commitments to WTO

1. Tariff lines- About 67 per cent of its tariff lines were bound. For non-agriculture goods, with a few exceptions ceiling bindings of 40 per cent and 25 per cent on

intermediate goods have been undertaken. The phase of reduction was extended to the year, 2005.

2. Quantitative Restrictions (QRs)

QRs on imports maintained on balance of payments grounds were notified to WTO in 1997 for 2,714 tariff lines at the eight digit level. In view of the improvements in India's balance of payments, the committee on balance of payments restrictions has asked India for a phase out for 277 the QRs. India reached an agreement with these countries, except USA, to phase out the QRs over a period of 6 years beginning 1997.

3. TRIPS

The ruling of the two WTO Dispute Settlement Panels following the complaints made by the USA and the European Union that India had failed to meet the commitments under Article 70.8 and 70.9 made it obligatory for the Government of India to make appropriate amendements to the patents Act 1970 by April 19, 1999.

The patents Act 1999, was passed by the Parliament in March 1999, to provide Exclusive Marketing Rights. In respect of plant varieties, a decision has been taken to put in place a suigeneris system as it is perceived to be in national interest.

As far as copyrights and related rights are concerned, the Copyright Act 1957 as amended in 1994 takes care of interest and meets the requirements of the TRIPs Agreement except in the case of terms of protection of performers rights.

A bill to increase this term to 50 years was passed by Parliament in December, 1999. As far as layout designs are concerned, a legislation giving protection to them was introduced in the Rajya Sabha on December 20, 1999 by the Department of Electronics.

In the field of trade marks, the Trade and Merchandise Marks Act (TMMA), 1958 is in its essential features, in the accordance with international law. A bill passed in Parliament in December, 1999 provides for protection to service marks.

With respect to geographical indications, there is specific law in India for this purpose. Case law enables legal action for protection of geographical indications. The Government of India decided to enact a new law on the subject to take advantage of

the provisions of the TRIPs Agreement. A bill in this regard was passed by the Parliament in December 1999.

4. TRIMs

The Government of India notified two TRIMs, viz., that relating to local content requirements in the production of certain pharmaceutical products and dividend balancing requirements in the case of investment in 22 categories of consumer items.

5. GATS

India has commitments in 33 activities. The choice of the activities has been guided by considerations of national benefits.

6. Customs Valuation Rules

India's legislation on Customs Valuation Rules 1998 has been amended to bring it in conformity with the provision of the WTO Agreement.

India proclaims that the trade under WTO regime would **benefit** it in several ways. The following are noteworthy.

1. It is expected that India's share in the world exports improves from 0.5 per cent to 1 per cent.

2. The phasing out of MFA by 2005 will benefit to India as the exports of textiles and clothing will increase. Tariff reductions and reduced non-tariff barriers shall facilitate greater access of foreign markets.

3. Benefits from increase in the world prices of agricultural products due to reduction in subsidies and barriers to trade are also likely to occur to India and consequently the earnings of agricultural exports will increase. From the India's point of view the major state of Central Government programmes for development of agriculture will be exempted from the WTO disciplines in the agricultural agreement.

4. The WTO agreement has strengthened multilateral rules and disciplines particularly related to anti-dumping, subsidies, countervailing measures, safeguards and disputes settlement. This will ensure greater security and predictability of international trading

system which create more favourable environment for India in the new world economic order.

WTO and its Impact on India

The main challenges India faced under the new international economic regime as a member of WTO are-

1. WTO on Indian Agriculture

It has legitmised various trade distorting practices of the developed countries in their favour. The provisions under AoA for UDCs are focused to reduce tariff commitments by an average of 24 per cent in equal steps over 10 years (upto 2004) from 1995 and for developed countries (DCs) it is 36 per cent over the period of 6 years (upto 2000) This resulted in selling the Indian agricultural goods are comparatively at higher prices due to high cost of cultivation. This discouraged the Indian farmers. The domestic grain market became non remunerative to the Indian farmers, even when the agricultural growth rate slided down to 4.6 per cent in 2000-2001. The average tariff barriers on 600 agricultural items have been reduced.

The custom duties on Indian goods entering the foreign market (USA, EU) continue to be high e.g. 180 per cent for wheat, while it is less than 80 per cent in India. It is disincentive to the investors. To bring at the level of equivalence, India should step up to enhance its export. India could get the benefit of competitiveness only in 46 items out of 406 exportable items.

As per the agreement, there are Product Specific (PS) and Non Product Specific (NPS) subsidies. NPS subsidies are given to fertilises, irrigation, pesticides, credit and other input subsidies.

PS subsidies cover the support to 22 products, of which 19 (rice, wheat, jowar, maize, barley, gram, groundnut, rapeseed, toria, cotton, soya, urad, moong, fur, tobacco, jute and sugarcane) are included in the list of commitments.

The economic help is further classified as Amber box subsidies covering statutory minimum price, grant to agricultural universities, water, services etc. under NSP and PS subsidies to 22 commodities in India. Green box subsidies cover help, consultancy

and basic services etc. And under blue box, subsidies coves direct subsidies, investment subsidies and subsidies on capital etc which are more beneficial to DCs.

DCs agreed to cut the value of export subsidies by 36 per cent over a period of 6 years from 1995 and the UDCs to cut the same by 24 per cent over a period of 10 years.

The DCs were to reduce 21 per cent in quantities of subsidised exports and UDCs to reduce 14 per cent of the same during same period. The DCs were allowed to reduce the cost of marketing and transporting exports under certain conditions.

On the contrary, The EU (UK, France, Germany etc.) countries gave an average 265 per cent of export subsidy, Brazil 60 per cent, Thailand 40 per cent, Pakistan 30 per cent and this has created a panic situation in the agricultural economy of India. Besides, imposition of import duties is neglected, QRs have been withdrawn, no direct export subsidy is given to the exporters of agricultural commodities. Thus, India had to oppose such hike in export subsidies in the Agricultural Round of talks.

TRIPS

The implementation period for India begins from 1995 and ends by 2005, India must grant product patents over pharmaceutical and agricultural chemical products. The patent terms will run from the date of the application field to 20 years thereafter.

It has far reaching implication for developing countries including India. Under the new agreement, inventor's rights widely cover patents, trademarks, copyright, industrial design, layout of integrated circuits, geographical indications and trade secrets. The phasing-out period is specified as 10 years for drugs and agro-chemicals and 5 years for the rest of the products.

The TRIPs brought in adverse effects on pharmaceutical industry in India, when new discoveries would become available at very heavy cost of royalties. According to the new agreement, when the product patents will be brought into force in the year 2005 in the developing India, drug prices will increase. The indigenous pharmaceutical industry following the process patent would be in an adverse position. Under TRIPs seeds will be patented by which the input costs of Indian farmers will increase.

Further the extension of IPR on agriculture had an negative impact on Indian Economy, as plant breeding and seed production was of public domain. Thus

patenting of plant varieties would be beneficial for MNCs. It would also impact food security programme.

Trade related Investment Measures

These measures assure free entry for foreign as well as Indian companies on the same terms and conditions. It means Indian companies will have to compete with the MNCs on the basis of survival of fittest. It has impact on small scale companies as they cannot compete with MNCs in the changed global competitive environment. As the foreign enterprises can set their business, it leads to takeover and acquisitions. On the other hand foreign investment leads to foreign exchange earnings and better technology in the country.

GATS

India will have to open up its service sector to other WTO member countries. This will result to entry of overseas service providers into the service sectors in the country The GATS agreements has the potential to open up all aspect of a national economy to foreign competition. There are several income generating services include brokerage, communications, non merchandise insurance, leasing and rental equipment, technical and professional services. GATS have been beneficial to some extent in India.

The areas that impacted India are Trade and NTBs. They were non transparent and complex and created complexities for India. The other was Labour standards and environment. There was trespassing the sovereignty of Nation states. Therec is inequality within the structure of WTO.

Multi National Companies

Multinational Corporations or Multinational Companies are corporate organizations that operate in more than one country other than home country. Multinational Companies (MNCs) have their central head office in the home country and secondary offices, facilities, factories, industries, and other such assets in other countries. These companies operate worldwide and hence also known as global enterprises. The activities are controlled and operated by the parent company worldwide.

The headquarters of a multinational company are located in the home country. The post Second World War period saw the rapid growth of multinationals in Europe, America and Japan.

The reason for the growth of multinationals are mainly because exporting may not be the best alternative because of trade barriers, perish ability, or a need to produce a product tailored to the local market. Thus, investing in a firm by purchasing stock or making loans appears to be an easy solution.

The firm wants greater control over management, product quality, and patented processes. Trade barriers or the needs of the local (foreign) market are much more common reasons for building foreign plants than the attraction of cheap labour.

In the 1950s and 1960s, MNCs adopted an ethnocentric outlook; that is, the orientation of the foreign operation was based on that of the parent company. The modern MNC has a geocentric orientation.

This simply means that the whole organized is treated as an interdependent system operating in many countries.

Reasons for emergence of MNCs-

Firstly, the MNC can sell its products in the vast global market.

Secondly, it can raise money for its operations throughout the world.

Thirdly, they are able to establish production facilities in countries where labour cost is low and raw materials are abundant in supply.

Finally, MNCs can employ efficient managers by being able to recruit the most technically qualified and managerially efficient people from the whole world.

Neil H. Jacoby defines a multinational company as follows: "A multinational corporation owns and manages business in two or more countries."

According to Franklin Root (1994), an MNC is a parent company that: engages in foreign production through its affiliates located in several countries, exercises direct control over the policies of its affiliates,

J. Dunning has defined a multinational corporation as "any enterprise which owns and controls income generating assets in more than one country."

Multinational corporate structure

Horizontally integrated multinational corporations manage production establishments located in different countries to produce the same or similar products. (example: McDonald's).

Vertically integrated multinational corporations manage production establishment in certain country/countries to produce products that serve as input to its production establishments in other country/countries. (Example: Adidas)

The diversified multinational corporations do not manage production establishments located in different countries that are horizontally nor vertically nor straight, nor non-straight integrated. (Example: Microsoft or Siemens A.G.).

The chief characteristics of multinational corporations are-

1. Huge Assets and Turnover:

Because of operations on a global basis, MNCs have huge physical and financial assets. This also results in huge turnover (sales) of MNCs. In fact, in terms of assets and turnover, many MNCs are bigger than national economies of several countries.

2. International Operations Through a Network of Branches:

MNCs have production and marketing operations in several countries; operating through a network of branches, subsidiaries and affiliates in host countries.

3. Unity of Control:

MNCs are characterized by unity of control. MNCs control business activities of their branches in foreign countries through head office located in the home country. Managements of branches operate within the policy framework of the parent corporation.

4. Mighty Economic Power:

MNCs are powerful economic entities. They keep on adding to their economic power through constant mergers and acquisitions of companies, in host countries.

5. Advanced and Sophisticated Technology:

Generally, a MNC has at its command advanced and sophisticated technology. It employs capital intensive technology in manufacturing and marketing.

6. Professional Management:

A MNC employs professionally trained managers to handle huge funds, advanced technology and international business operations.

7. Aggressive Advertising and Marketing:

MNCs spend huge sums of money on advertising and marketing to secure international business. This is, perhaps, the biggest strategy of success of MNCs. Because of this strategy, they are able to sell whatever products/services, they produce/generate.

Better Quality of Products:

A MNC has to compete on the world level. It, therefore, has to pay special attention to the quality of its products.

Benefits of MNCs:

The MNCs have become a very powerful force in the world economy during the last few decades. They have exercised a revolutionary effect on international economic system in general and industrial organisation in particular. It has been truly regarded

as a remarkable economic phenomenon of the twentieth century. The benefits of these organisations are based upon the theory of foreign direct investments.

They are as follows-

(i) Employment Generation:

MNCs create large scale employment opportunities in host countries. This is a big advantage of MNCs for countries; where there is a lot of unemployment.

(ii) Automatic Inflow of Foreign Capital:
MNCs bring in much needed capital for the rapid development of developing countries. In fact, with the entry of MNCs, inflow of foreign capital is automatic. As a result of the entry of MNCs, India e.g. has attracted foreign investment with several million dollars.

(iv) Proper Use of Idle Resources:

Because of their advanced technical knowledge, MNCs are in a position to properly utilise idle physical and human resources of the host country. This results in an increase in the National Income of the host country.

(v) Improvement in Balance of Payment Position:
MNCs help the host countries to increase their exports. They help the host country to improve upon its Balance of Payment position.

(vi) Technical Development:
MNCs carry the advantages of technical development for host countries. MNCs are a vehicle for transference of technical development from one country to another.

(vii) Managerial Development:

MNCs employ latest management techniques. People employed by MNCs are in to research in management. It helps for professionalized management along the latest

lines of management theory and practice. This leads to managerial development in host countries.

(viii) End of Local Monopolies:

The entry of MNCs leads to competition in the host countries. Local monopolies of host countries either start improving their products or reduce their prices. Thus MNCs put an end to exploitative practices of local monopolists. MNCs compel domestic companies to improve their efficiency and quality.

(ix) Improvement in Standard of Living:

MNCs generate more jobs, increase in income, increased consumption and availabity of quality products and services, thus theycontribute for improvement in the standard of living of people of host countries.

(x) Promotion of international brotherhood and culture:

MNCs integrate economies of various nations with the world economy. Through their international dealings, MNCs promote international brotherhood and culture; and pave way for world peace and prosperity.

Limitations of MNCs from the Viewpoint of Host Country:

(i) Danger for Domestic Industries:

MNCs, because of their vast economic power, pose a danger to domestic industries; which are still in the process of development. Domestic industries cannot face challenges posed by MNCs. Many domestic industries have to wind up, as a result of threat from MNCs. Thus MNCs give a setback to the economic growth of host countries.

(ii) Repatriation of Profits:

MNCs earn huge profits. Repatriation of profits by MNCs adversely affects the foreign exchange reserves of the host country; which means that a large amount of foreign exchange goes out of the host country.

(iii)No Benefit to Poor People:

MNCs produce only those things, which are used by the rich. Therefore, poor people of host countries do not get, generally, any benefit, out of MNCs.

(iv) Danger to Independence:

Initially MNCs help the Government of the host country, in a number of ways; and then gradually start interfering in the political affairs of the host country. There is, then, an implicit danger to the independence of the host country, in the long-run.

(v) Disregard of the National Interests of the Host Country:

MNCs invest in most profitable sectors; and disregard the national goals and priorities of the host country. They do not care for the development of backward regions; and never care to solve chronic problems of the host country like unemployment and poverty.

(vi) Misuse of Mighty Status:

MNCs are powerful economic entities. They can afford to bear losses for a long while, in the hope of earning huge profits-once they have ended local competition and achieved monopoly. This may be the strategy of MNCs to wipe off local competitors from the host country.

(vii) Careless Exploitation of Natural Resources:

MNCs tend to use the natural resources of the host country carelessly. They cause rapid depletion of some of the non-renewable natural resources of the host country. In this way, MNCs cause a permanent damage to the economic development of the host country.

(viii) Selfish Promotion of Alien Culture:

MNCs tend to promote alien culture in host country to sell their products. They make people forget about their own cultural heritage. In India, e.g. MNCs have created a taste for synthetic food, soft drinks etc. This promotion of foreign culture by MNCs is injurious to the health of people also.

(ix) Exploitation of People, in a Systematic Manner:

MNCs join hands with big business houses of host country and emerge as powerful monopolies. This leads to concentration of economic power only in a few hands. Gradually these monopolies make it their birth right to exploit poor people and enrich themselves at the cost of the poor working class.

Foreign Direct Investments

Foreign direct investment is defined as the ownership of assets in one country by the resident of another country. The upsurge of FDI in the post World War II era focused on US multinationals and their worldwide operations in manufacturing industries. Foreign Direct Investment is the investment of funds by an organisation from one country into another, with the intent of establishing 'lasting interest'. According to OECD (Organisation for Economic Co-operation and Development), lasting interest is determined when the organisation acquires a minimum of 10% of voting power in another organisation. Reinvestment of profits from overseas operations, as well as intra - organisational loans and borrowings to overseas subsidiaries are also categorised as FDI.

The definition also encompasses the international movement of elements that are complementary to capital - such as skills, processes, management, technology etc.

FDI can be Greenfield, wherein an organisation creates a subsidiary concern in another country and builds its business operations there from the ground up. Greenfield investments provide the highest degree of control to the organisation. It can construct the production plant as per its specifications, employ and train human resources as per company standards, as well as design and monitor its operational processes.

FDI can be Brownfield - wherein an organisation expands by way of cross border mergers, acquisitions and joint ventures by either leasing or purchasing existing facilities for its production.

According to US Department of Commerce, when the organization of a country invests in the foreign country to acquire at least 10% stake of a foreign organization, then this investment is considered as FDI. Increase in foreign investment in a country is considered as a measure of economic development.

FDI provides an opportunity to the domestic organizations to form joint ventures with the foreign organizations. Every nation desires for attaining FDI, which is a capital resource that helps in increasing the production of goods and services.

FDI has many benefits over other types of foreign investment that make it attractive for developing countries having shortage of resource. It is a non-debt inflow that helps in transferring new technology, bringing new skills in markets, providing new markets for domestic products, and creating new employment opportunities.

FDI leads to-

Increased Employment and Economic Growth

Creation of jobs is the most obvious advantage of FDI. Increased FDI boosts the manufacturing as well as the services sector. This in turn creates jobs, and helps reduce unemployment among the educated youth - as well as skilled and unskilled labour in the country. Increased employment translates to increased incomes, and equips the population with enhanced buying power. This boosts the economy of the country.

Human Resource Development

This is one of the less obvious advantages of FDI. Hence, it is often understated. Human Capital refers to the knowledge and competence of the workforce. Skills gained and enhanced through training and experience boost the education and human capital quotient of the country. Once developed, human capital is mobile.

Development of Backward Areas

This is one of the most crucial benefits of FDI for a developing country. FDI enables the transformation of backward areas in a country into industrial centres. This in turn provides a boost to the social economy of the area.

Provision of Finance & Technology

Recipient businesses get access to latest financing tools, technologies and operational practices from across the world. Over time, the introduction of newer, enhanced technologies and processes have resulted in their diffusion into the local economy, resulting in enhanced efficiency and effectiveness of the industry.

Increase in Exports

All goods produced through FDI are not meant for domestic consumption. Many of these products have global markets. The creation of 100% Export Oriented Units and Economic Zones helps FDI investors in boosting their exports to other countries.

Exchange Rate Stability

The constant flow of FDI into a country translates into a continuous flow of foreign exchange. This helps the country's Central Bank maintain a comfortable reserve of foreign exchange. This in turn ensures stable exchange rates.

Stimulation of Economic Development

FDI is a source of external capital and higher revenues for a country. When factories are constructed, at least some local labour, materials and equipment are utilised. Once the construction is complete, the factory will employ some local employees and further use local materials and services. The people who are employed by such factories thus have more money to spend. This creates more jobs.

Improved Capital Flow

Inflow of capital is particularly beneficial for countries with limited domestic resources, as well as for nations with restricted opportunities to raise funds in global capital markets.

Creation of a Competitive Market

By facilitating the entry of foreign organisations into the domestic marketplace, FDI helps create a competitive environment, as well as break domestic monopolies. A healthy competitive environment pushes firms to continuously enhance their processes and product offerings, thereby fostering innovation. Consumers also gain access to a wider range of competitively priced products.

Some of the issues of FDI are-

1. Profit repatriation

Firms regularly repatriate their profits from investment to the account of their parent companies in the form of dividends or royalties transferred to shareholders as well as the simple transfer of accrued profits. It also helps them avoid larger taxes by using

transfer prices. However, this profit repatriation results in huge capital outflows from the host country to the home country and negatively affects the balance of payment of the former.

Dual economy effect

FDI, especially, in the developing countries can lead to have a dual economy, which has one developed sector mostly owned by foreign firms and underdeveloped sector owned by domestic firms. Since the country's economy becomes overly dependent on the developed sector, its economic structure changes. Often this developed sector is the capital intensive, while another one is labour intensive. Therefore, dual economy effect hampers the economic development of countries as most of their citizens are located in the non-developed labour intensive sector.

Balance of payment effect

Empirical studies reveal that a bidirectional relationship exists between foreign investments and imports. An increase in FDI inflows from the home country will result in an increase in imports in the host country from the home country. As more investment flows in, the host country economy becomes more and more dependent on the production technology of MNC's home country. The host country will have to import more inputs and intermediate goods from the MNE's home country, which might constrain the development in the domestic industry. If these investments are not export-oriented, the host country can suffer from trade deficits

Infrastructure development constraint

FDI constrains basic infrastructure development by diverting resources from public investment in infrastructure. Since FDI is attracted mostly to wealthy parts of the host country, the infrastructure in these regions will require a greater effort to be improved, especially depriving the poorer regions and the rural regions

Environmental issues

A large volume of FDI is concentrated in natural resource sectors of developing and less developed countries. Most of these countries have a less strict or non-existent regulatory regime. Sometimes countries deliberately attempt to exempt or loosen their regulatory requirements to attract FDI. However, while these countries can benefit

from positive effects of investment, the negative effects of FDI on host country's ecosystems and environment might bring disaster in the long run.

FDI can cause political, social and cultural unrest and divisiveness in the host countries by introduction of unacceptable chart values, which include advertising, business customs, labour practices and etc, and by direct interference of the MNEs in the political regime or electoral process in the host country

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