#### **DJN2B - MONEY AND BANKING**

### Unit I: INTRODUCTION

Barter system- Inconvenience of Barter system- Meaning of money- evolution and kinds of money- functions of money- significance of money – defects of money- qualities of good money.

### Unit II: MONETARY STANDARD

Meaning and types of monetary standard- Monometallism - Gresham's law - gold standard: meaning- features- types- advantage and disadvantages- cause for the breakdown of gold standard- managed paper currency standard- principles and methods of note issue- advantages and disadvantages of paper currency.

#### Unit III: VALUE OF MONEY

The concept of value of money- measurement of change in value of money- demand for money- factors governing demand for money- three motives. The supply of money-velocity of circulation of money- quantity theory of money given be Irving fisher-Cambridge equations- saving and investment theory.

### Unit IV: INFLATION AND DEFLATION

Inflation- meaning- types- features- causes and effects of inflation- measures to control inflation- deflation- meaning- features- causes and effects of deflation- anti- deflationary measures.

#### Unit V: BANKING

Meaning- importance of banks- types- unit banking, branch banking and mixed banking-function of a commercial bank- credit creation- role of commercial banks in the development of a country- nature of central bank- quantitative and qualitative credit control methods- role and functions of reserve bank of India.

### **Reference Books**

- 1. An outline of money- Growther G
- 2. Monetary Economics- M.L.Seth
- 3. Monetary Economics- M.V. Vaish
- 4. Money, banking, international trade and public finance- D.M.Mithani
- 5. Money, banking, trade and finance- K.P.M.Sundaram.

# UNIT I INTRODUCTION

## **The Barter System**

Areas are to be found in many rural areas of under-developed countries. Before the evolution of money, exchange was done on the basic of direct exchange of goods and services. This is known as barter. Barter involves the direct exchange of one good for some quantity of another good. For example, a horse may be exchanged for a cow, or 3 sheep or 4 goats. For a transaction to take place. There must be a double coincidence of wants. It is also a simple economy where people produce goods. Either for self-consumption or for exchange with other goods which they want. Bartering was found in primitive societies. But it is still practiced at places where the use of money has not spread much. Such non-monetised areas are to be found in many rural areas of under-developed countries.

### **Difficulties of Barter**

But the barter system is the most inconvenient method of exchange. It involves loss of much Time and effort on part of people in trying to exchange goods and services. As a method of exchange, the barter system has the following difficulties and disadvantages.

- 1. *Lack of Double coincidence of wants*. The functioning of the barter system requires a double coincidence of wants on the part of those who want to exchange goods or services. It is necessary for a person who wishesTo trade his good or service to find some other person who is not only willing to buy his good or services, but also possesses that good which the former wants. For example, suppose a person possesses a horse wants to exchange it for a cow.
- 2. Lack of a Common Measure of Value. Another difficulty under the barter system relates to the lack of a common unit in which the value of goods and services should be measured. Even if the two person who wants each other's goods meet by

coincidence, the problem arises as to the proportion in which the two goods should be exchanged. There being no common measure of value, the rate of exchange will arbitrarily fixed according to the intensity of demand for each other's goods. Consequently, one party is at a disadvantage in the terms of trade between the two goods.

- 3. Indivisibility of Certain Goods. The barter system is based on the exchange of goods with other goods it is difficult to fix exchange rates for certain goods which are indivisible. Such indivisible goods pose a real problem, under barter. A person may desire a horse and the other a sheep and both may willing to trade. The former may demand more than four sheep for a horse but the other is not prepared to give five sheep and thus there is no exchange.
- 4. Difficulty in Storing Value. Under the barter system it is difficult to store value. Anyone wanting to save real capital over a long period would be faced with the difficulty that during the intervening period the stored commodity may become obsolete or deteriorate in value. As people trade in cattle, grains, and other such perishable commodities, it is very expensive and often difficult to store and to prevent their deterioration and loss over the long period.
- 5. Difficulty in Making Deferred Payments. In a barter economy, it is difficult to make payments in future. As payments are made in goods and services, debt contracts are not possible due to disagreement on the part of the two parties on the following grounds. Both parties would run the risk that the commodity to be repaid would increase or decrease seriously in value over the duration of the contract.
- 6. Lack of Specialisation. Another difficulty of the barter system is that it is associated with a production system where each person is a jack-of-all trades. In other words, a high degree of specialization is difficult to achieve under the barter

system. Specialization and interdependence in production is only possible in an expanded market system based on the money economy. Thus no economic progress is possible in a barter economy due to lack of specialization.

### **EVOLUTION AND KINDS OF MONEY**

The word "money" is derived from the latin word "moneta" which was the surname of the Roman Goddess of juno in whose temple at Rome, money was coined. The origin of money is lost in antiquity. Even the primitive man had some sort of money. The type of money in every age depended on the nature of its livelihood. In a hunting society, the skins of wild animals were used as money. The pastoral society used livestock, whereas the agricultural society used grains and foodstuffs as money. The Greeks used coins money.

## **Stages in the Evolution of Money**

The evolution of money has passed through the following five stages depending upon the progress human civilization at different times and place.

# 1. Commodity Money

Various types of commodities have been used as money from the beginning of human civilization. Stones, spears, bows and arrows, and axe's were used as money in the hunting society.

## 2. **Metallic Money**

With the spread of civilization and tread relation by land and sea, metallic money took the place of commodity money. Many nation started using silver, gold, copper, tin, etc. as money.

# 3. **Paper Money**

The development of paper money started with goldsmiths who kept strong safes to store their gold. As goldsmith was thought to be honest merchants, people started keeping

their gold with them for safe custody. In return, the goldsmith gave the depositors a receipt promising to return the gold on demand. These receipts of the goldsmith were given to the sellers of commodities by the buyers. Thus the receipts of the goldsmiths were a substitute for money. Such paper money was backed by gold and was convertible on demand in to gold. This ultimately led to the development of bank notes.

# 4. **Credit Money**

Another stage in the evolution of money in the modern world is the use of the cheque as money. The cheque is like a bank note in that it performs the same function. It is a means of transferring money or obligation from one person to another. But a cheque is different from a bank note. A cheque is made for a specific sum, and it expires with a single transaction. But a cheque is not money. It is simply a written order to transfer money. However, large transaction are made through cheques these days and bank notes are used only for small transaction.

# 5. Near Money.

The final stage in evolution of money has been the use of bills of exchange, treasury bills, bonds, debentures, savings certificates, etc. They are known as "near money". They are close substitutes for money and are liquid asserts. Thus in the final stage of its evolution money has become intangible. Its ownership is now transferable simply by book entry.

# **Function of Money**

Money performs a number of primary, secondary, contingent and other functions which not only remove the difficulties of barter but also oils the wheels of trade and industry in the present day world. We discuss these functions one by one.

# 1. Primary Functions

The two primary functions of money are to act as a medium of exchange and as a unit of value.

# (i) Money as a Medium of exchange.

This is the primary function of money because it is out of this function that its other functions developed. By serving as a medium of exchange, money removes the need for double coincidence of wants and the inconveniences and difficulties associated with barter. The introduction of money as a medium of exchange decomposes the single transaction of barter into separate transaction of sale and purchase, thereby eliminating the double coincidence of wants. This function of money also separate the tran-saction in time and place because the sellers and buyers of a commodity are not required to perform the transactions at the same time and place. This is because the seller of a commodity buys some money and money in turn, buys the commodity over time and place.

(ii) *Money as Unit of Value*. The second primary function of money is to act as a unit of value. Under barter one would have to resort to some standard of measurement, such as a length of string or a piece of wood. since one would have to use a standard to measure the length and height of any object, it is only sensible that one particular standard should be accepted as the standard. Money is the standard for measuring valuejust as the yard or metre is the standard for measuring length. The monetary unite measures and expresses the values of all goods and services. In fact, the monetary unit expresses the value of each good or services in terms of price. Money is the common denomination which determines the rate of exchange between goods and services which are priced in terms of the monetary unit. There can be no pricing process without a measure of value.

# 2. Secondary Function

Money performs three secondary functions: (i) as a standard of deferred payments, (ii) as a store of value, and (iii) as a transfer of value. They are discussed below:

(i) Money as a Standard of Deferred payments. The third function of money is that it acts as a standard of deferred or postponed payments. All debts are taken in money. It was easy under barter to take loans in goats or grains but difficult to make repayments in such perishable articles in the future. Money has simplified both the taking and repayment of loans because the unit of account is durable. Money links the present values with those of the future. It simplifies credit transaction. It makes possible contract

# Credit creation by commercial banks

### 1. Do banks create credit?

The creation of credit or deposits is one of the most important function of commercial banks. Like other corporation, banks aim at earning profits. For this purpose, they accept cash in demand deposits and advance loans on credit to customers. When a bank advances a loan, it does not pay the amount in cash. But it opens a current account in his name and allows him to withdraw the required sum by cheques. In this way, the bank creates credit or deposits.

Demand deposits arise in two ways: one, when customers deposit currency with commercial banks, and two, when banks advance loans, discount bills, provide overdraft facilities, and make investments through bonds and securities. The first type of demand deposits are called "primary deposits". Banks play a passive role in opening them. The second type of demand deposits are called "derivate deposits". Banks actively create such deposits.

Do banks really create credit or deposits?

There have been two views on this subject: one held by certain economists like Hartley withers, and the other held by practical like walter leaf.

## **UNIT II**

### MONETARY STANDARDS

## 1. Meaning and Types of Monetary Standard

Monetary standard refers to the overall set of laws and practices which control the quality and quantity of money in a country. It is, in fact, the standard money of the country which determines and regulates the exchange value of goods and services. Thus the monetary standard of a nation is its standard monetary unit. A monetary standard aims at maintaining stability in the internal as well as external value of the currency.

There have been different types of monetary standards in the evolution of money. But only two types of monetary standards in the recent past. They are metallic or commodity standard and paper or fiat standard. The metallic standard refers to a monetary system in which the value of the monetary unit is expressed in terms of a fixed quantity of some metal. If the monetary system is related to only one metal, it is known as monometallism. Monometallism may refer to the gold standard, if the metal is gold, and to silver standard, if the metal is silver. If the monetary unit is made of two metals, the monetary standard is called bimetallism. In the paper standard, paper notes circulate as legal tender money. They may be convertible into the metal, gold or silver, of a fixed weight, or inconvertible.

In this chapter, we shall study the gold standard, bimetallism and paper standard.

### THE GOLD STANDARD

Meaning. The gold standard is a monometallic standard in which the value of the monetary unit is fixed in term of a specified weight and purity. As pointed out by Robertson, "Gold standard is a state of affairs in which a country keeps the value of its monetary and the value of a defined weight of gold at an equality with one other." Coulborn's definition is simple. He writes, "The gold standard is an arrangement

whereby the chief piece of money of a country is exchangeable with a fixed quantity of gold of a specified quality."

# **Types of the Gold Standard**

The meanings of the gold standard, as given above, relates to its general form. But different at different times adopted different types of gold standard which are explained as under.

## 1. Gold currency standard.

This standard prevailed prior to 1914 in the UK, USA and certain countries. It was also known as the gold coin standard, gold circulation standard or full or pure gold standard. It had six main features: (i) gold coins of a definite weight and fineness circulated within the country. For instance, in England the sovereign was the gold coin which contained 123.2744 grams of gold of 11/12<sup>th</sup> purity. (ii) The gold coin (i.e. sovereign in Britain) was full and unlimited legal tender. (iii) Non-gold metallic and paper currency notes also circulated side by side but they were convertible on demand into gold coins at fixed rates, (iv) There was free coinage in gold. Any body could take gold or jewellery to the mint for coinage, (v) Gold coin could be freely minted for other purposes, (vi) Export and import of gold was free and unrestricted.

# 2. Gold Bullion standard

This standard was in operation in the UK between 1925 and 1931 and in India between 1927 and 1931. This monetary system had five distinguishing features: (i) Gold coins did not circulate within the country. The legal tender currency in circulation consisted of paper currency notes and token coins of silver and other metals. (ii) These were convertible at fixed rates into gold at bars or bullion. For instance, in England currency notes were convertible into gold bars containing 400 oz. of gold at the fixed price of 3-17s-10d per oz. of 11/12<sup>th</sup> fineness. When India adopted this system in 1927,

rupee was convertible into gold bars containing 40 total at the price of Rs.27, 7 annas 10 pies per total. (iii) for converting currency into gold, the monetary authority was required to keep gold bars in reserve. (iv)The monetary authority also bought gold from the public at a fixed price. (v) Gold was freely exported and imported.

# 2. Gold Exchange standard

This was in operation in India between 1898 and 1913 and in a number of eastern countries which were poor and did not possess sufficient gold. But mostly such countries were under the colonial rule and their currencies were linked with the currency of the ruling country. The principal features of this monetary system were: (i) Gold coins did not circulate within the country. (ii) The currency consisted of paper notes and token coins of silver and other metals. (iii) These were not convertible into gold coins or bullion, (iv) But the local currency was linked with some foreign currency which was on gold currency standard, (v) It was convertible into such foreign currency at a fixed rate. For instance, the Indian rupee coins were convertible into British sterling at the ratio of 1s-4d per rupee, (iv) Since the currency was indirectly linked with gold, prices of goods and services were consequently determined by the price of the gold, (vii) Gold could not be exported and imported freely. Only the monetary authority was authorized to export and import gold. But actually payments were made in the securities of the two countries. For instance, rupee and sterling securities were bought and sold and England and India respectively at the fixed exchange rate of 1s-4d per rupee.

# 3. Gold Reserve standard

England was the first country to abandon the gold standard in 1931, followed by the USA in 1933 and France in 1936. This led instability in their exchange rates. To maintain exchange stability, they entered into Tripartite Monetary Agreement in September 1936 and they were joined by the Netherlands, Belgium and Switzerland in the

same year. This agreement came to be known as the gold reserve standard and worked successfully till the outbreak of the Second World War in September 1939. The main feature of this system were: (a)There were no gold coins within the country, (b) The currency consisted of paper notes and token coins of cheap metals, (c) This currency was inconvertible into billion, (d) Under the Agreement, each country maintained an Exchange Equalisation Fund which kept gold, local currency and foreign exchange. (e) There was no free export or import of gold expect by the authority for maintaining stability in the exchange rate. Such gold was meant to be kapt in the fund. (f) There was strict secrecy about the reserves of gold and foreign exchange kept in the fund.

### 4. Gold Parity Standard

This system has emerged with the establishment of the International Monetary fund in 1944. It does not possess any feature of the various gold standards explained above. Under this system, every country has to declare the par value of its monetary unit bin terms of a fixed quantity of gold. So this is not gold standard in the real sense of the term, except that it aims at keeping the exchange rate of the currency stable in the gold. "But whatever form the gold standard may take, its essential characteristic is that the

currency is, either directly or at one move, either in volume or in value, linked to gold.

### **Rules of the Gold Standard**

The gold standard functioned smoothly before the First World War. In order to study its working it is essential the conditions for its success. These conditions have come to be known as the "Rules of the games". The Macmillan Committee pointed out in this connection, "It is difficult to define in precise terms what is implied by the game. "The management of on international standard is an ort and not a science, and no one world suggest that it is possible to draw up a formal code of action. Much must be left to time

and circumstance." But it recommended the following general principles for the successful working of the international gold standard.

- It should involve a common agreement among nations as to the objectives for which it existed.
- 2. It should bring stability of prices and guarantee stability of exchange.
- 3. Individual central banks should avoid such action which might endanger stability of prices through their effects on the policy of other central banks.

Given these three principles the countries on the gold standard were expected to observe the following rules or conditions for its smooth working.

- 1. There should be free and unrestricted export and import of gold between countries.
- 2. The country receiving (importing) gold should expand credit within the country and the gold-exporting country should contract credit.
- 3. There should be a high degree of price, wages, income and cash flexibility in countries on the gold standard so that these change with gold movements. For instance, when gold flows into the country, money supply should increase which should lead to rise in prices, wages and income, and costs would be adjusted accordingly. The opposite would be the case in the event of the outflow of gold to other countries. It would lead to increase in money supply, fall in prices, wages, income and costs. Thus the success of the gold standard depends upon flexibility in the economic set-up of the economy.
- 4. The successful working of the gold standard presupposed the existence of free trade among nations. The gold standard was essentially a laissez-fair standard.
- 5. The country on the gold standard should strictly adhere to the policy of maintaining exchange stability and other objectives should be subservient to it.

- 6. There should be no disturbing large capital movements based on speculative activities. In fact, the smooth working of the gold standard depended to a large extent upon the degree to which the movements of short-term funds could be influenced by changes in the bank rate.
- 7. Another condition was that the gold value of the domestic currency was to be kept stable. It should not be overvalued or undervalued.
- 8. Last but not the least, the success of the gold standard required normal times. That is why, it broke down during the First World War and the disturbed condition following the war.
- 9. The gold standard worked smoothly so long as the countries following these rules to the letter. As pointed out by Crowther, "This gold standard is a jealous god. It will work provided it is given exclusive devotion." This continued upto 1914 and after that when they started breaking these rules gradually, the gold standard broke down.

## **Working of the Gold Standard**

The question arises: how did the gold standard work or what was the mechanism of the gold standard? The answer to this question is related to the functioning of the gold standard before 1914.

All countries which were on the gold standard in the late 19<sup>th</sup> and early 29<sup>th</sup> century were inter-related and inter-dependent. A country having a favorable

Balance of trade received gold from other country, because it had excess of exports over imports. On the contrary, a country having a unfavorable trade suffered from the loss of gold on account of the excess of imports over exports. This movement of gold affected both the countries, the country with the inflow of gold and that having on outflow of gold. The monetary reserves of the country with the gold inflow would increase. It would lead to an increase in the internal money supply of the country. The increased money supply

was reflected in increased expenditures on goods and services. This led to rise in prices, wages, income, and costs. Consequently, the increase in the cost-price structure of the economy's domestically produced goods became relatively dearer in comparison with foreign goods. This tended to reduce exports and increase imports. Thus a surplus in the balance of payment of a country caused by a favorable balance of trade would be automatically corrected in the country with the gold inflow.

On the other hand, the reverse process would be repeated in the country with the gold outflow. The outflow of the gold would lead to decline in its monetary reserves. This would decrease the internal money supply of the country. As a result, prices declined along with wages, income, and costs. This made the domestically produced goods relatively cheaper then foreign goods. So exports increased and imports declined. Thus a deficit in the balance of payments of country by an unfavorable balance of trade was automatically corrected in the country with gold outflow.

Was It Automatic? From the above analysis of the working of the gold standard, it seems that there was some visible hand which helped the attainment of "automatic equilibrium" in the balance of payments of both gold inflow and outflow countries. But this is not a correct view about the actual working of the gold standard. In reality, there was a large degree of management in its working—even during its hey days before the First World War. Powerful central banks, like the bank of England managed the internal policies of the government in each country for the gold standard to function the way the economic thought it should function.

One of the principle objectives of the central bank policy was to maintain stable exchange rates for a country on the gold standard. The adjustment in the domestic price level as a result of gold movements was not automatic. Rather, it was modified by the bank rate policy of the central bank.

Moreover, the total currency in a country was connected to gold reserves which increased or decreased with the rise or fall on the latter. It was the total volume of currency which affected the price level in turn. So the central bank operated the bank rate policy to undertake corrective measures within the economy for keeping exchange rates stable with gold outflows or inflows.

When there was an outflow gold, the gold reserves of the country declined. Consequently, the total volume of currency also declined and prices fell. But in order to protect the monetary reserves of the country, the central bank raised the bank rate. Higher interest rates induced the indigenous capitalists to invest funds internally and also attracted foreign investment to the country. These tendencies led to the reduction of gold outflow and also to an inflow of gold. In either case, the monetary reserves of the country were protected. Similarly, the central bank seldom adopted corrective measures in the event of gold inflow. The increase in the monetary reserves of the country was welcomed. So it was left to the gold losing country to undertaken measures.

The Deflationary Bias. Whenever a country lost gold, it experienced falling prices, In fact, it was in the interest of the gold losing country to deflate prices. But it became difficult to bring revival once deflation started. If the country lost much gold during a short period of time, the deflating pressures along with the rise in the bank rate would bring a financial crisis. Since wages are rigid in the downward direction, it would lead to large scale unemployment. Once the economy was in deep depression, it was difficult to bring a revival with the efforts of the central bank. Considering all this, Mrs.John Robinson pointed out that the gold standard had an "inherent bias towards deflation.

There where to more reasons for the deflationary bias of the gold standard mechanism. First, trade took place between countries of unequal size. But gold standard presupposed trade relations between homogeneous countries of approximately equal size."Second, for

others balance of payments were more important relative to their internal economy, while for others balance of payments had less importance. Naturally, countries which depended more on imports having large gold outflows tended to have deflationary bias.

Despite this deflationary bias, the gold standard functioned smoothly prior to 1914. This is because "the gold standard mechanism was ... never put to a really severe test. Major international interruptions were absent, the price-cost structures of the different countries were in conformity with the exchange rates and international capital movements served mainly to put sufficient reserves at the disposal of those countries which were, at the moment in need of it."

#### The Decline and fall of the Gold Standard

The gold standard could work only if the "rules of the game" were observed which could be observed under normal conditions. But when the First World War broke out in 1914, the belligerent countries went off the gold standard because they had to suspend convertibility of currency into gold. They withdrew gold coins from circulation and replaced them by paper currency. England prohibited the melting of gold coins and the export of gold though it did not stop conversion of notes into gold coins. Some of the countries did make payments of the neutral

Countries in gold. During the war the belligerent countries suffered from inflation of varying degrees. But they could not be controlled because the countries could not observes the rules of the game. So the gold standard virtually broke down during the war period.

After the war, most countries suffered from inflation of varying degrees which made it difficult to fix gold value of domestic currency at pre-war rates. Prestige led Great Britain to return to the gold standard at the pre-war parity and it was commonly estimated that the pound was overvalued by 10 per cent. This was

Because the price level in Britain was higher than in America by this percentage. The actual exchange rate was fixed at \$4.866= 1 but the equilibrium rate was \$4.38= 1. So England's goods were overpriced and of America's under-priced. This adversely affected British exports and favoured imports from America. But Italy overvalued its Lira and France undervalued its France. By 1928 the restoration of the gold standard was complete.

But it was not the gold standard which existed before the 1914 war. Rather, it was a truncated gold standard with failure of the government to follow the golden rules of the gold standard game. Consequently, with the beginning of the Great Depression in 1929, the final collapse of the gold standard began. Four south American countries were the first to go off the gold standard by the end of 1930. England, along with twenty two other countries, abandoned the gold standard in 1931. By the end of 1936, practically all countries had left the gold standard.

Causes of the breakdown of the gold standard. Economics have pointed to a number of causes which led to the breakdown of the gold standard. First, the monetary authorities in the different countries were no longer exclusively devoted to the aims of the gold standard as they had been before the war. As put by Crowther, "gold standard is a jealous god. It will work provided it is given exclusive devotion." They were not prepared to follow the rules of the gold standard. After the restoration of the gold standard in 1920s, every country wanted to have price stability. But the primary objective of the gold standard was have exchange stability. So price stability was not compatible with the maintenance of the gold standard. Hence it broke down for failure to observe this golden rule of the game.

*Second*, the technical task of maintaining exchange stability was more difficult than before the first World War. Exchange stability could be maintained by making adjustment

in the internal price level of countries. But it was difficult to make constant readjustment in prices due to three reason: (i) The domestic currencies were either overvalued or undervalued; (ii) there was downward rigidity in the wage-cost structure in case of downward readjustment of prices; and (iii)readjustment were also difficult because the short-term funds of banks could not be influenced by change in the rate of interest. The short-term wfunds were affected more by speculation or fear than by the interest rate.

*Third*, the imposition of reparation and the insistence on the repayment of War debts from Germany made it difficult for the foreign market to be controlled by the gold standard. To pay Reparations and War debts, Germany had to buy dollars irrespective of its gold reserve position and the bank rate, and the countries which received such payments could not make adjustment accordingly.

Forth, almost every country imposed high tariffs. Imposition of high tariffs especially by the creditor countries restricted imports from debtor countries. This was a clear violation of the rule of the gold standard. When a debtor country was losing gold, it was essential for it to lower internal prices in order to expand exports. But high tariffs by the creditor countries prevented the expansion of exports and thus made adjustments in foreign exchange difficult. This led many countries to abandon the gold standard.

Fifth, the central banks failed to observe the gold rule: "expand credit when gold is coming in; contract credit when gold is going out." The United States and France, which were receiving gold did not expand credit sufficiently. On the other hand, Germany and Great Britain which were losing gold tried to make adjustments by borrowing from the gold-receiving countries. This meant the non-observes of the rule of the gold standard. There were, however, some immediate causes which led to the breakdown of the gold standard beginning from 1930.

- (i) The first cause was the steep fall in the price levels of a number of countries. This brought a fall in the demand for exports and reduced the foreign exchange earning of exporting countries. These were the countries which depended on exports of raw materials whose prices fell sharply. Their exports earning declined considerably but they could not protect their gold reserve from falling as they continued to make gold payments for their international obligation.
- (ii) The second immediate cause of the abandonment of the gold standard was the virtual cessation of international lending from 1929. We saw above that many debtor countries had borrowing from the United States to meet their international payments and protect their gold reserves during 1920-27. But with the coming in of the Great Depression, such countries stopped borrowing and found it difficult to make gold payments for their international obligation.
- (iii) The last immediate cause was the presence of large short-term international debts against London and New York financial markets. These were payable on demand at short notice. A wave of fear caused the lenders of these short-term funds or "Hot Money" to ask for their repayments. It all started with the failure of the largest bank in Austria, the Credit Anstalt in may 1931. This led to international banking panic in Germany, France, United States and Great Britain, where there were run on banks by creditors with the result that they stopped payments and froze credits in terms of gold. And the gold standard had finally ended. Hawtery observes, "The immediate cause of the crisis, it is true, was the withdrawal of foreign money, first from Austria and Germany and then England, but this was the result of distrust, and the distrust was directly due to the appreciation of gold.

#### **Merits of the Gold Standard**

The international gold standard which operated for more than three decades in different forms had certain merits.

# 1. Inspired Public Confidence

The gold standard inspired public confidence because the domestic currency was linked with gold. People knew that gold was an internationally accepted medium of payments, and a standard and a store of value. Therefore, they had full confidence in the paper currency which was convertible into gold bullion or coins or securities.

# 2. No outside Interference

The international gold standard had the merit of working without any outside interference by any other country or international authority.

# 3. Automatic Operation.

The gold standard functioned smoothly provided 'the rules of the game" were observed. These rules were not complex but easy to understand and follow for the countries. Thus the gold standard provided a simple and automatic monetary system to the countries of the world.

### 4. Stable Exchange Rates

Another merit of the gold standard was that it maintained stable exchange rates between countries. The exchange rate of every country was fixed in terms of its mint par or the gold value of its currency. The actual exchange rate between gold export and gold import points which took account of the cost of transporting gold from one country to the other. Thus the exchange rate was stable and fluctuations occurred only between the two gold points.

### 5. Stable Internal Prices

The gold standard secured relative stability of internal prices. When there was an inflow of gold, prices rose. And they fell with gold outflow. But when prices rose, exports

diminished and imports increased. On the other hand, fall in prices led to expansion of exports and decline in imports. These opposite tendencies started gold outflow in the former case and gold inflow in the later case. Ultimately, price stability was maintained in the trading countries.

## 6. Check on Inflation.

Under the gold standard the currency of a country was linked with gold and was convertible into it. As the issuing of currency was backed by specified quantity of gold, there was a limit up to which the authorities could issue currency. For every increase in the amount of the currency, gold reserves were also required to be increased to a given extent. There was also no fear of inflation, because the country could not increase the quantity of money in unlimited quantity. As against this, the present system of managed paper standard, having a fixed gold backing, leads the authorities to issue paper money in unlimited quantities thereby leading to inflation.

### 7. Expansion of International Trade.

The gold standard helped in the expansion of international trade. This was made possible by stable exchange rate and stable value of gold in countries. These led to the expansion of international trade and capital movements.

#### **Demerits of the Gold Standard**

Despite these merits, the actual working of the gold standard revealed a number of disadvantages which the countries of the world had to experience. Some of them were as under:

### 1. Fair Weather Standard

Critics pointed out that the gold standard acted like a fair weather friend. It worked smoothly in normal or peace times first but failed during war or economic crises.

Its actual working shows that it had to be suspended during the First World War and finally abandoned during the Great Depression. So it was a fair weather standard.

## 2. **Not Automatic**

It is a misnomer to say that the gold standard worked automatically. In fact, all varieties of it had to be managed by the monetary authority or the central bank. The gold standard did not work automatically. The central bank had to change the bank rate in accordance with gold movements in order to affect the price level.

# 3. Exchange Stability at the Cost of Economic Stability

One of the principal objectives of the gold standard was maintain exchange stability. But this was always attained at the cost of economic stability. When every time there were gold movements, the internal price level had to be adjusted accordingly in order to maintain exchange stability. These price fluctuations led to internal economic instability which ultimately harmed the country. It is for this reason that now-a-days all countries prefer internal price stability to exchange stability.

# 4. Anarchy in world Credit Control

Hawtrey characterized the gold standard as state of anarchy in world credit control. Since the gold standard was a laissez-faire standard and operated only under normal times, it failed miserably in conditions of severe inflation or deflation. During the First World War, inflation spread to all countries of the world. On the other hand, when depression started in 1929 it became a worldwide phenomenon. Thus the gold standard by itself was unable to control either inflation or deflation. Rather, it had to sacrifice itself at the alters of inflation and deflation.

# 5. **Deflationary Bias**

According to Mrs. John Robinson, the standard had an inherent bias towards deflation. It was in the interest of the gold losing country to deflate prices, But once

deflation started it became very difficult to bring revival even with the best efforts of the central bank. The long drawn depression of 1930s proved this fact without any shadow or doubt.

# 6. **No Independent Policy**

A country of the gold standard could not follow an independent policy of its own. It had to follow that policy which was adopted by all other countries. Failure to follow a common policy alongwith other countries mean; abandoning the gold standard. This implied breaking of all trade relations with countries on the gold standard which could be harmful for the country.

# 7. **Costly Standard**

The gold standard was a costly standard because it was based on gold. Every country had to circulate gold coins or keep gold reserves. As against this the paper standard is much cheaper and also economies the use of gold.

## 8. **Rigid standard**

The gold standard was a rigid standard because for its success the rules of the game had to be observed in letter and spirit. A country could not increase the money supply to finance a war pr development activities or any financial emergency without increasing the gold reserves with its central bank. If it had to export gold to import the necessary equipment, raw materials and other goods it needed for war or development purposes. It was expected to reduce the internal price level by force in keeping with the rules of the gold standard game. Thus it was a highly rigid standard.

## 9. Adverse Effects of Interest Rate Changes

Under one of the rules of the gold standard, the central bank of the country was required to affect changes in the bank rate in keeping with the outflow of gold movements. When there was an inflow of gold, the bank rate was lowered, while it was

raised with the outflow of gold. Such changes in interest rates were forced upon trade and industry simply to expand or reduce money income within the country. They, therefore, adversely affected trade and industry.

Taking in to account the various disadvantages of the gold standard enumerated above, it can be concluded that the gold standard was an unnecessary standard. The managed paper standard can secure on all the advantages enjoyed by the gold standard minus its disadvantages. That is why the gold standard is now a thing of the past and is only of academic interest, never to be restored again.

## WHAT LED TO THE NON-RESTORATION OF THE GOLD STANDARD?

After the collapse of the gold standard, no country was willing to restore the gold standard for the following reasons: *First*, the supply of gold could not be increased to meet its increasing demand. So no country was willing to export it to observe the rules of the game. *Secondly*, more so because the majority of gold reserves flowed into the United States. *Thirdly*, no country was willing to bring instability to its economy for the sake of maintaining exchange stability. *Fourthly*, development of nationalism motivated every country to formulate economic policies in keeping with its self-interest. *Lastly*, every country felt that it could manage its monetary affairs in a far better way by adopting a managed paper standard than the gold standard.

#### **BIMETALLISM**

Bimetallism, also known as bimetallism standard, is a monetary system under which the monetary unit of the country is expressed by law in terms of two metals, usually gold and silver, in a specific ratio. They are unlimited legal tender. They are minted freely and in unlimited quantities free or with some charge. Both metals are imported and exported freely.

Bimetallism was in vogue in England throughout the 18<sup>th</sup> century. The United States adopted it in 1792, when the mint ratio between silver and gold was fixed at 15:1. France adopted it in 1803 followed by Belgium, Switzerland and Italy in 1865. With the growing popularity of the gold standard, it was abandoned by these European countries in 1874.

#### MERITS OF BIMETALLISM

Bimetallism as monetary system had the following advantages:

- 1. Adequate Supply of Currency. One of the merits of bimetallism was that it ensured an adequate supply of currency within the country. As both gold and silver coins were in circulation and freely minted, there was no likelihood of both becoming short in supply simultaneously.
- 2. **Price Stability**. It was also argued that flexibility of money supply assured price stability. The internal price level was linked with the prices of gold and silver. And the prices of gold and silver depended upon their supply and demand.
- 3. Stable Price of Silver. In those days, the price of silver was falling and the silver producing countries were at a disadvantage in trading with gold standard countries. It was, therefore, felt that the adopting of bimetallism would increase the demand for silver and raise its price. This would increase the purchasing power of silver-producing countries and also help in overcoming depression in them.
- 4. *Stable Exchange Rates*. The ratio of exchange between gold and silver was fixed, being determined by the value of silver. Therefore, there was no possibility of the market rate of exchange to deviate from the mint par rate of exchange.
- 5. *Encouragement to Foreign Trade*. First, due to exchange stability between countries, and second, a country on bimetallism could have trade relations with any country on bimetallism and on silver or gold standard.

- 6. *Easy to Keep Cash Reserves*. As both gold and silver coins were unlimited legal tender under bimetallism it was convenient and easy for commercial banks to keep minimum cash reserves against their liabilities either in gold or silver coins.
- 7. **Encouragement to Production**. The advocates of bimetallism condended that bimetallism as a monetary system was superior to the silver or gold standard because it encouraged production.

#### **DEMERITS OF BIMETALLISM**

The opponents of bimetallism give the following arguments against this monetary system.

- 1. *Inequality of Market Ratio and Mint Ratio*. The success of the bimetallic standard depended upon the maintenance of equality between ratio and mint ratio of gold and silver. But it was not possible to maintain this equality because of a strong tendency towards the continuous increase in the supply of one metal.
- 2. *Operation of Gresham's Law*. As a corollary to the above, when there was divergence between the mint ratio and the market ratio the Gresham's law would operate and bimetallism would breakdown.
- 3. *Not successful internationally*. It was argued that if bimetallism was adopted by many countries, it would be successful. But this presupposed the adoption of the same mint ratio between the gold and silver by all countries. But it was not possible to expect international cooperation on maintaining a uniform ratio in every country.
- 4. **No Price Stability**. The opponents of bimetallism dispute that flexibility of money led to price stability. According to them, there was no set rule that when the supply of one metal of the other metal would fall.

#### **GRESHAM'S LAW**

During the reign of Queen Elizabeth I it was found that debased coins continued to circulate while full bodied coins were hoarded or melted for their specie content. The Chancellor of the Exchequer under Elizabeth I, sir Thomas Gresham enquired about this phenomenon in 1558 and came to the conclusion that "bad money drives out good money." This has come to be known as Gresham's Law. Marshall defined this law more explicitly thus, "whenever the specie value of a certain class of coins exceeds their currency value, the coins will begin to go into the melting pot or be exported," Thus "bad money" refers to debased or clipped or worn out legal tender money such as coins and paper notes.

When full-bodied and debased coins circulate together, people have a tendency to hoard the good and try to pass on the bad ones as medium of exchange. They may even melt the full-bodied coins for bullion in order to export it or use it for jewellery. This actually happened in countries which were on silver or gold standard.

This law also operates under the bimetallic standard when gold and silver coins circulated simultaneously and one metal becomes overvalued relative to the other metal. The metal which is overvalued drives out the undervalued metal out of circulation. Suppose the mint ratio between gold and silver is 1 oz of gold coin=15 ozs. Of silver coin (1: 15). Suppose silver coins become overvalued which means that their money (face) value exceeds their metallic (intrinsic) value. On the other hand, gold coins become undervalued which means their metallic value exceeds their money value. As a result, let us say the market ratio becomes 1:17.People will thus find it profitable to melt gold coins to exchange 1 oz. of gold for 17 ozs. Of silver in the market, and thereby gain 2 ozs. Of silver. It is in this way that the overvalued (bad) currency drives out the undervalued (good) currency out of circulation under bimetallism.

Further, Gresham's law operates when paper currency notes circulate alongwith gold and silver coins. In this case paper notes are bad money and or silver coins are good money. This actually happened during the Revolutionary War in the United States of America when the bad paper money drove all gold and silver coins out of circulation between 1775-79.

#### Limitations of the Law

There are, however, certain limitations of this law so that it will operates only if the following conditions are fulfilled:

- 1. If the total money in circulation, including, both good and bad money, exceeds the actual monetary demand of the public.
- 2. If the public is prepared to accept and circulate bad money.
- 3. If the good money is full-bodied legal tender whose face value monetary demand of the public.
- 4. If the total supply of bad money is sufficient to meet the total monetary demand of the public.

With managed paper standard in circulation along with token coins, Gresham's law is only of limited validity in modern times. Still we find the tendency among people to pass on worn out notes and debased coins first. But this is nit Gresham's law proper because neither fresh notes nor good coins go out of circulation but their use is suspended for a while.

# PAPER CURRENCY STANDARD

Paper currency standard consists of paper money which is unlimited legal tender and token coins of cheap metals. Paper money may be either convertible or inconvertible. Convertible paper money is convertible into gold or silver coins or bullion of specified weight on demand. Paper money is not convertible into coins of a precious metal of bullion now-a-days. Therefore, it is

inconvertible. People accept it because it is legal tender. Since it has command of the government, people have to accept it. That is why it is also known as *fiat* money or standard.

#### MERITS OF THE PAPER STANDARD

The paper standard, which is universally used, has a number of merits:

- 1. **Economical**. The paper standard is cheaper than gold or silver standard. There is no need to waste gold or silver for coinage purpose. Rather precious metals can be used for productive purpose and for making payments to foreign countries. As paper money is not convertible, there is no need to keep gold in the form of reserves. The monetary authorities keep only a fixed quantity of gold in reserve for reason of security. Thus the paper standard is cheap and economical and even a poor country can easily adopt it.
- 2. *Elastic*. The paper standard is a highly useful monetary system because it possesses great elasticity. The monetary authority can easily adjust the money supply in accordance with the requirements of the economy. This was not possible under the gold standard. The supply of money can be increased by printing more notes in times of financial emergency, war, and for economic development. It can also be reduced when the economic situation so demands. Thus there is also freedom in the management of the money supply in the economic.
- 3. *Price Stability*. As a corollary to the above, the paper standard ensures price stability in the country. The monetary authority can stability the price level by maintaining equilibrium between demand and supply of money by an appropriate monetary policy.
- 4. *Free form Cyclical Effects*. The paper standard is free from the effects of business cycles arising in other countries. This merit was not available to other monetary standards, especially the gold standard, where cyclical movements in one country were automatically passed on to other countries through gold movements.
- 5. Full Utilization of Resources. The gold standard had a deflationary bias whereby the resource of the country remained unutilized. Whenever there was gold outflow prices fell and resources became unemployed. But this is not the case under the paper standard in which the monetary authority can manipulate the monetary policy in order to ensure full utilization of the country's resources.

- 6. *Equilibrium in Exchange Rate*. One of the merits of the paper standard is that it immediately restores equilibrium in the exchange rate of the country whenever disequilibrium occurs in the demand and supply of its currency in the foreign exchange market.
- 7. **Portable**. It is very convenient to carry large sums of paper money from one place to another.
- 8. *Easy to Count*. It is easier to count paper money then metallic money.
- 9. *Easy to store*. It is easier to store large sums of paper money in a small space.
- 10. *Cognisable*. It is easy to recognise paper notes of different denominations.
- 11. *Replaceable*. Paper notes of one type and denomination can be easily replaced by printing notes of different types of the same denomination.

#### DEMERITS OF THE PAPER STANDARD

Despite these merits, the paper standard has certain disadvantages:

- 1. *Inflationary Bias*. One of the serious defect of the paper standard is that it has an inflationary bias. As paper notes are inconvertible, there is every likelihood of the government printing notes in excess of the requirements. Or, the government may deliberately resort to the printing press to meet a financial emergency or war or even to meet ordinary budget deficits. This leads to excess of money supply and to inflation in the country.
- 2. **Price Stability** a Myth. It has been pointed out in the merits of the paper standard that it leads to price stability. In actuality, price stability is a myth as has been the experience of the majority of countries on the paper standard.
- 3. **Exchange Instability**. Another disadvantage of this system is that leads to instability in exchange rates whenever there are large fluctuations in external prices. Such wide and violent fluctuations in exchange rates are harmful for the growth of international trade and capital movements among countries. These have led governments to adopt exchange control measures.
- 4. *Lacks Confidence*. Paper money lacks confidence as it is not backed by gold reserves.
- 5. *Lacks Durability*. Paper money has less durability than metallic coins. It can be easily destroyed by fire or insects.
- 6. *Unstable*. Paper money lacks stability because its supply can be changed easily.

- 7. *Uncertainty*. Instability in the value of paper money leads to uncertainty in the economy which adversely affects business and economic progress.
- 8. *Token Money*. Paper money is token money and in the event of demonetization of notes, they have no intrinsic value and are simply like waste paper.
- 9. *Not Automatic*. The paper currency standard does not operate automatically. It is a highly managed standard which requires much care and caution on the part of the monetary authority. A little carelessness may bring disaster to the economy.

# **UNIT III**

# VALUE OF MONEY

# **Quantity theory of Money**

The quantity theory of money states that the quantity of money is the main determinant of the price level or the value of money. Any change in the quantity of money produces an exactly proportionate change in the price level.

In the words of Irving 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." If the quantity of money is doubled, the price level will also double and the value of money will be one half. On the other hand, if the quantity of money is reduced by one half, the price level will also be reduced by one half and the value of money will be twice.

Fisher has explained his theory in terms of his equation of exchange:

PT=MV+ M' V'

Where P = price level, or 1 IP = the value of money;

M =the total quantity of legal tender money;

V =the velocity of circulation of M;

M' – the total quantity of credit money;

V' = the velocity of circulation of M;

T = the total amount of goods and services exchanged for money or transactions performed by money.

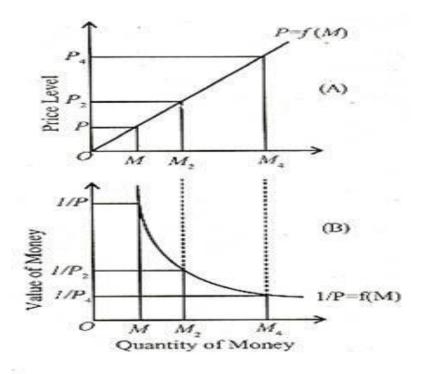
This equation equates the demand for money (PT) to supply of money (MV=M'V). The total volume of transactions multiplied by the price level (PT) represents the demand for money.

According to Fisher, PT is SPQ. In other words, price level (P) multiplied by quantity bought (Q) by the community (S) gives the total demand for money. This equals the total supply of money in the community consisting of the quantity of actual money M and its velocity of circulation V plus the total quantity of credit money M' and its velocity of circulation V'. Thus the total value of purchases (PT) in a year is measured by MV+M'V'. Thus the equation of exchange is PT=MV+M'V'. In order to find out the effect of the quantity of money on the price level or the value of money, we write the equation as

### P = MV + M'V'

Fisher points out the price level (P) (M+M') provided the volume of tra remain unchanged. The truth of this proposition is evident from the fact that if M and M' are doubled, while V, V and T remain constant, P is also doubled, but the value of money (1/P) is reduced to half.

Fisher's quantity theory of money is explained with the help of Figure (A) and (B). Panel A of the figure shows the effect of changes in the quantity of money on the price level. To begin with, when the quantity of money is M, the price level is P.



When the quantity of money is doubled to  $M_2$ , the price level is also doubled to  $P_2$ . Further, when the quantity of money is increased four-fold to  $M_4$ , the price level also increases by four times to  $P_4$ . This relationship is expressed by the curve P = f(M) from the origin at  $45^{\circ}$ .

In panel B of the figure, the inverse relation between the quantity of money and the value of money is depicted where the value of money is taken on the vertical axis. When the quantity of money is  $M_1$  the value of money is HP. But with the doubling of the quantity of money to  $M_2$ , the value of money becomes one-half of what it was before,  $1/P_2$ . And with the quantity of money increasing by four-fold to  $M_4$ , the value of money is reduced by  $1/P_4$ . This inverse relationship between the quantity of money and the value of money is shown by downward sloping curve 1/P = f(M).

# **Assumptions of the Theory:**

Fisher's theory is based on the following assumptions:

- 1. P is passive factor in the equation of exchange which is affected by the other factors.
- 2. The proportion of M' to M remains constant.

- 3. V and V are assumed to be constant and are independent of changes in M and M'.
- 4. T also remains constant and is independent of other factors such as M, M, V and V.
- 5. It is assumed that the demand for money is proportional to the value of transactions.
- 6. The supply of money is assumed as an exogenously determined constant.
- 7. The theory is applicable in the long run.
- 8. It is based on the assumption of the existence of full employment in the economy.

# **Criticisms of the Theory:**

The Fisher quantity theory has been subjected to severe criticisms by economists.

### 1. Truism:

According to Keynes, "The quantity theory of money is a truism." Fisher's equation of exchange is a simple truism because it states that the total quantity of money (MV+M'V') paid for goods and services must equal their value (PT). But it cannot be accepted today that a certain percentage change in the quantity of money leads to the same percentage change in the price level.

# 2. Other things not equal:

The direct and proportionate relation between quantity of money and price level in Fisher's equation is based on the assumption that "other things remain unchanged". But in real life, V, V and T are not constant. Moreover, they are not independent of M, M' and P. Rather, all elements in Fisher's equation are interrelated and interdependent. For instance, a change in M may cause a change in V.

Consequently, the price level may change more in proportion to a change in the quantity of money. Similarly, a change in P may cause a change in M. Rise in the price level may necessitate the issue of more money. Moreover, the volume of transactions T is also affected by changes in P. When prices rise or fall, the volume of business transactions also rises or falls. Further, the assumptions that the proportion M' to M is constant, has

not been borne out by facts. Not only this, M and M' are not independent of T. An increase in the volume of business transactions requires an increase in the supply of money (M and M').

#### 3. Constants Relate to Different Time:

Prof. Halm criticises Fisher for multiplying M and V because M relates to a point of time and V to a period of time. The former is a static concept and the latter a dynamic. It is therefore, technically inconsistent to multiply two non-comparable factors.

# 4. Fails to Measure Value of Money:

Fisher's equation does not measure the purchasing power of money but only cash transactions, that is, the volume of business transactions of all kinds or what Fisher calls the volume of trade in the community during a year. But the purchasing power of money (or value of money) relates to transactions for the purchase of goods and services for consumption. Thus the quantity theory fails to measure the value of money.

## 5. Weak Theory:

According to Crowther, the quantity theory is weak in many respects. First, it cannot explain 'why' there are fluctuations in the price level in the short run. Second, it gives undue importance to the price level as if changes in prices were the most critical and important phenomenon of the economic system. Third, it places a misleading emphasis on the quantity of money as the principal cause of changes in the price level during the trade cycle.

Prices may not rise despite increase in the quantity of money during depression; and they may not decline with reduction in the quantity of money during boom. Further, low prices during depression are not caused by shortage of quantity of money, and high prices during prosperity are not caused by abundance of quantity of money. Thus, "the quantity

theory is at best an imperfect guide to the causes of the trade cycle in the short period" according to Crowther.

## **6. Neglects Interest Rate:**

One of the main weaknesses of Fisher's quantity theory of money is that it neglects the role of the rate of interest as one of the causative factors between money and prices. Fisher's equation of exchange is related to an equilibrium situation in which rate of interest is independent of the quantity of money.

# 7. Unrealistic Assumptions:

Keynes in his General Theory severely criticised the Fisherian quantity theory of money for its unrealistic assumptions. First, the quantity theory of money for its unrealistic assumptions. First, the quantity theory of money is unrealistic because it analyses the relation between M and P in the long run. Thus it neglects the short run factors which influence this relationship. Second, Fisher's equation holds good under the assumption of full employment. But Keynes regards full employment as a special situation. The general situation is one of the under-employment equilibrium. Third, Keynes does not believe that the relationship between the quantity of money and the price level is direct and proportional.

Rather, it is an indirect one via the rate of interest and the level of output. According to Keynes, "So long as there is unemployment, output and employment will change in the same proportion as the quantity of money, and when there is full employment, prices will change in the same proportion as the quantity of money." Thus Keynes integrated the theory of output with value theory and monetary theory and criticised Fisher for dividing economics "into two compartments with no doors and windows between the theory of value and theory of money and prices."

#### 8. V not Constant:

Further, Keynes pointed out that when there is underemployment equilibrium, the velocity of circulation of money V is highly unstable and would change with changes in the stock of money or money income. Thus it was unrealistic for Fisher to assume V to be constant and independent of M.

# 9. Neglects Store of Value Function:

Another weakness of the quantity theory of money is that it concentrates on the supply of money and assumes the demand for money to be constant. In order words, it neglects the store-of-value function of money and considers only the medium-of-exchange function of money. Thus the theory is one-sided.

# 10. Neglects Real Balance Effect:

Don Patinkin has criticised Fisher for failure to make use of the real balance effect, that is, the real value of cash balances. A fall in the price level raises the real value of cash balances which leads to increased spending and hence to rise in income, output and employment in the economy. According to Patinkin, Fisher gives undue importance to the quantity of money and neglects the role of real money balances.

## 11. Static:

Fisher's theory is static in nature because of its such unrealistic assumptions as long run, full employment, etc. It is, therefore, not applicable to a modern dynamic economy.

# **Cambridge equation**

The **Cambridge equation** formally represents the **Cambridge cash-balance theory**, an alternative approach to the classical quantity theory of money. Both quantity theories, Cambridge and classical, attempt to express a relationship among the amount of goods produced, the price level, amounts of money, and how money moves. The Cambridge equation focuses on money demand instead of money supply. The theories

also differ in explaining the movement of money: In the classical version, associated with Irving Fisher, money moves at a fixed rate and serves only as a medium of exchange while in the Cambridge approach money acts as a store of value and its movement depends on the desirability of holding cash.

Economists associated with Cambridge University, including Alfred Marshall, A.C. Pigou, and John Maynard Keynes (before he developed his own, eponymous school of thought) contributed to a quantity theory of money that paid more attention to money demand than the supply-oriented classical version. The Cambridge economists argued that a certain portion of the money supply will not be used for transactions; instead, it will be held for the convenience and security of having cash on hand. This portion of cash is commonly represented as k, a portion of nominal income (the product of the price level and real income)

Assuming that the economy is at equilibrium ( ), is exogenous, and k is fixed in the short run, the Cambridge equation is equivalent to the equation of exchange with velocity equal to the inverse of k:

# **Explanation to the Theory:**

The Cambridge economists—like Alfred Marshall and A. C. Pigou—presented an alternative to Fisher's version of Quantity Theory.

They have attempted to establish that the Quantity Theory of Money is a theory of demand for money (or liquidity preference). The Cambridge version of the Quantity Theory of Money is now presented.

Formally, the Cambridge equation is identical with the income version of Fisher's equation: M = kPY, where k = 1/V in the Fisher's equation.

**Proof**: 
$$P = \frac{MV}{T}$$
  
or,  $\frac{P}{V} = \frac{M}{T}$  or,  $\frac{1}{V} = \frac{M}{PT}$   
or,  $M = \frac{1}{V}PT$  or,  $M = \frac{1}{V}PY$ , if we substitute  $T$  for  $Y$   
or,  $M = kPY$  where  $k = \frac{1}{V}$  in Fisher's equation.

Here 1/V = M/PT measures the amount of money required per unit of transactions and its inverse V measures the rate of turnover or each unit of money per period.

So if k and Y remain constant, P is directly proportional to the initial quantity of money (M).

#### **Criticisms:**

## 1. The Chain of Causation:

Critics argued that all the factors in the equation of exchange are variables and statistical studies have shown that they are interrelated. Moreover, the line of causation is not always from M (money supply) to P (the price level). It may be from V to P. A change in the rate of spending, all the other factors remaining the same, will result in a change in prices just as surely as would a change in the Quantity Theory of money, other things remaining the same.

Or a change in T, other things remaining the same, will cause a change in prices. So it is difficult to accept the theory that changes in the quantity of money are always the causes in the price level. Studies have shown that the price level cannot be easily and quickly controlled by changing the amount of money and credit available for the purchase of goods and services.

It may also be said that, under certain circumstances, an increase in the quantity of money will not produce any change in the price level. Keynes has pointed out that the Quantity

Theory is inapplicable to a country which has unemployed resources (capital and labour not in use).

In such a country, creation of more money will lead to more employment and higher production (larger supply of goods) and no change in the price level. Prices will change in proportion to money supply only when there is no scope for increasing production, i.e., when there are no unemployed resources in the economy.

#### 2. There are Inactive Balances:

Under Fisher's formula, the price level depends upon the total quantity of money. But it is only a part of the total quantity of money which influences prices. There always exist inactive balances (hoards) which exert no pressure at all on the prices of goods and services. This is clearly seen during depressions.

# 3. Simultaneous Changes:

The Quantity liquation cannot be used for analysing the effects, of changes in M, or T, on the price level except on the ceteris paribus assumption, "other things remaining constant." But in the case of monetary variables such an assumption cannot be made. When M changes, T and V both change. When T changes, M, and V change. The net effect on the price level of a change in any of the variables of the quantity equation depends on how the other variables are simultaneously changed.

# 4. The Process of Change:

Theory does not show the process through which changes in the amount of money affect the price level. Keynes put great emphasis on this point.

## He observed that:

"The fundamental problem of monetary theory is not merely to establish identities or statistical relation but to treat the problem dynamically, analysing the different elements involved in such a manner as to exhibit the causal processes by which the price-level is determined and the method of transition from one equilibrium to another."

# 5. The Assumption of Full Employment:

So increase in the quantity of money does not always increase prices. If there are unemployed resources, increase of money increases employment and not prices. As Keynes points out, the Quantity Theory is based on the assumption of Full Employment.

# 6. The Value of Money Determines the Quantity of Money:

According to Quantity Theory, an increase in the supply of goods or it will cause a fall in the price level P. Monetary and banking practices, increases in the supply of goods always leads to an increase in the supply of money (through creation of credit and otherwise). M therefore, depends on T; they are not independent variables. If this view is correct, the value of money is not determined by its quantity; on the contrary it is the value of money which determines its quantity.

# 7. Non-Monetary Factors:

Prices may change and the value of money vary for reasons entirely unconnected with the quantity of money.

# Some examples are given below:

- (i) Changes in the level of efficiency wages may change costs of production and affect prices.
- (ii) If increase of output occurs under conditions of diminishing returns, marginal costs will rise and prices will rise. Similarly, prices will fall if production increases under conditions of increasing returns.
- (iii) Increase and decrease of monopoly power will, respectively, increase and decrease prices.

(iv) Prices are affected by variations in effective demand or expenditure. Consumption expenditure and investment expenditure both vary—as also the proportion between them.

## 8. Misleading Emphasis:

Finally, according to Crowther the Quantity Theory puts a misleading emphasis on the importance of the quantity of money as the cause of price changes and pays too much attention on the level of prices. In the short rim these principles of the Quantity Theory are not in accord with facts. In actual life the price level and volume of production move up and down in a cyclical pattern.

The Quantity Theory draws pointed attention to one important factor which causes price change, viz., the quantity of money. It is admitted that the quantity formula "hides many links in the chain of causation", but it is undisputed that the formula gives us a rough and ready method of determining the effects of changes in the quantity of money and certain other factors influencing the price level.

From the above discussion it is clear that the Quantity Theory is inadequate and defective. It has, however, certain merits. Generally, we find that when money supply increases, the price level rises. For example, during 1939-45 in India there was a large increase in the volume of notes and bank advances and the price level rose very fast. Hence, there is some relationship between the quantity of money and the value of money. The Quantity Theory states the relationship not with absolute correctness but only approximately.

Dr. Milton Friedman (the 1976 Nobel Prize winner) believes that the quantity theory of money is true in its simple or cured form, i.e., price (P) varies with quantity of money (M). He believes that there is a proportionality between the quantity of money and the general price level in an economy.

# The Keynes Income and Expenditure Theory

The old quantity theory of money is weak in that it establishes a direct relationship between the money supply and the aggregate demand. According to the quantity theorists, an increase in the money supply leads to an increase in the aggregate demand for goods and services, and vice versa.

It is the increase in the quantity of money which by increasing the aggregate demand for goods and services leads to rise in prices, and vice versa. But the experience during the Great Depression has shown that increase in the money supply failed to increase the aggregate demand.

The income theory was gradually developed by Tooke, Wick-sell and Afflation and finally by Keynes. According to them, it is changes in income rather than in the money supply which cause changes in the aggregate demand. When income increases, aggregate demand for goods and services also increases. People spend more and the price level rises. On the contrary, with the decline in income, the aggregate demand falls. People spend less and the price level falls.

Therefore, changes in the price level depend upon the volume of expenditure in the economy which in turn is determined by changes in the level of income. And the level of income depends upon the volume of saving and investment in the economy. Thus changes in the price level or value of money are caused by the income and expenditure of the community or by the volume of saving and investment. Thus income and expenditure, and saving investment are the two approaches to the income theory which we discuss below.

# **Income-Expenditure Approach:**

The income theory of prices involves on the one side an analysis of income and aggregate demand, and on the other, an analysis of costs and aggregate supply. Prices are determined by money income and real income.

The total money income (Y) is the value of goods and services produced in any period of time and expressed in terms of money. It is determined by the remuneration paid in terms of money to the factors of production. Thus it also refers to the sum of total expenditure (E) incurred on goods and services pricing a period. On the other hand, the 'real' income is the total value of real money value of goods and services expressed in terms of a general price level of a particular year taken as the base. Thus the money value of real income is the money income which is determined by the prices of goods and services or output. Symbolically,

$$Y = P.O.$$

Where Y is Money income or money expenditure which produces a flow of income, P is the general level of prices, and O is the physical volume of goods and services produced. It follows that

$$P = Y/O$$

It means that prices are determined by the ratio of money income to total output. When money income (Y) rises more rapidly than output (O) prices (P) will tend to increase. If, on the other hand, output (O) increases more rapidly than money income (10, prices (P) will tend to fall.

It is clear from the above that total money income equals total expenditure which, in turn, is equal to consumption expenditure (C) plus investment expenditure (I). Therefore, symbolically, Y = E = C + I.

According to Keynes, it is the total money income which determines the total expenditure of the community. An increase in the money income means increase investment expenditure, the propensity to consume being stable in the short run.

The increased investment will raise effective demand which will in-turn, raise output and employment. But what about prices? So long as there is unemployment, prices do not rise with the increase in output. This is because the supply of factors is perfectly elastic. Therefore, output will change in the same proportion as the quantity of money, and there will be no change in prices. When the supply of factors becomes somewhat inelastic (or factor are in short supply), this may lead to increase in marginal costs and prices.

As full employment is reached, the elasticity of supply of output falls to zero (perfectly inelastic), and prices rise in proportion to the increase in the quantity of money. Thus the income theory states that the increase in the quantity of money depends upon increase in money income and aggregate expenditure, and prices start rising when the full employment level is being reached. Once the full employment level is reached, prices rise in the same proportion as the increase in money income and aggregate expenditure.

# **Saving-Investment Approach:**

## **Introduction:**

An alternative to the Keynesian income-expenditure theory is the saving investment approach to income theory. In fact the income-expenditure approach (Y = C + I) is the same thing as the saving-investment approach. Both saving (S) and investment (I) are defined as the excess of income over consumption (Y-C) so that they are necessarily equal. Symbolically

$$S = Y-C$$

$$I = Y - C$$

$$S = I$$

Keynes also established this equality in another way. He defined income as equal to consumption plus investment (Y = C + I), and saving as the excess of income over consumption (S = Y - C). Thus

$$Y - C + I$$
 or  $I = Y - C$   $S = Y - C$ 

$$S = I$$

## The Theory:

We have seen above that the equality between saving and investment is brought about by the mechanism of income. On the other hand, income depends upon relation between saving and investment. So long as saving and investment are equal, there will be the equilibrium level of income and the price level will be stable. If saving and investment are disturbed, the price-level also changes via the change in expenditure.

If saving exceeds investment, it means that people reduce their expenditure on goods and services. They are hoarding more money and spending less. This reduces the velocity of circulation of money. This leads to a reduction in the income of the producers of goods and services.

Reduced expenditure and income lead to a fall in the price level. As prices fall, investment also declines due to a fall in the marginal efficiency of capital which leads to further falling income, output, employment, and prices. This process will continue till prices reach the bottom of the depression.

If investment exceeds saving, people increase their expenditure on goods and services. They are spending more and saving less. This causes the velocity of circulation to increase. This increases the income of the producers of goods and services. Increase in expenditure and income lead to a rise in the price level.

This will increase the profit expectations or marginal efficiency of capital. As a result, investment will increase further which will, in turn, raise employment, income,

expenditure, output and prices to still higher levels. But the increase in investment leading to an increase in aggregate expenditure, demand, and income do not lead to a rise in the price level immediately. So long as the output of goods and services rises proportionately with the increase in the demand for goods and services, there would not be a general rise in the price level. If output does not increase proportionately, increase in investment will increase income and the price level. But increase in output is possible only if there are unemployed resources in the economy.

When the economy reaches the full employment level, further increase in income will not raises output to the level of increase in aggregate expenditure. But it will to an upward rise in the price levelling the same proportion as the increase in income.

To conclude, it is the inequality in saving and investment that brings about changes in the price level, and changes in the price level are due to changes in income rather than in the quantity of money.

# Superiority of Income-Expenditure (or Saving-Investment) Theory Over the Quantity Theory:

The income-expenditure theory of money is considered superior to the quantity theory of money on the following grounds:

# 1. Explains Business Cycles:

The quantity theory cannot explain changes in prices during the upswing and downswing of a business cycle. It does not explain why an abundance of money during a depression fails to bring about a revival, and shortage of money stops a boom. The income theory is superior to the quantity theory because it explains them.

According to the saving investment theory, when investment exceeds saving rival starts from a depression. More increase in the supply of money is not enough to bring about a

revival. It is the rise in business expectations of profit (or the marginal efficiency of capital) that encourage investment and the revival starts.

On the other hand, a boom does not stop due to decrease in the money supply alone. Rather it stops because saving exceeds investment due to the falling the expectations of profit. Thus it is changes in investment due to changes in business expectations of profit that lead to cyclical upswing and downswing. Crowther has apathy said, "The Quantity Theory of Money explains, as it were, the average level of the sea; the saving and Investment Theory explains the violence of the tides.

# 2. Explains Changes in Velocity of Circulation of Money:

The quantity theory of money does not explain the causes of changes in the velocity of circulation of money. The saving-investment theory is superior in that it gives an adequate explanation of such changes. When saving exceeds investment, it means that people are hoarding more money and spending less. This reduces the velocity of circulation of money. On the contrary, when investment exceeds saving, people are spending more which causes the velocity of circulation of money to increase. Thus changes in the velocity of circulation of money are caused by the relationship between saving and investment.

# 3. Explains Causal Relationship between Quantity of Money and Price Level:

The quantity theory of money fails to explain the causal relationship between the quantity of money and the price level. It simply explains that the relationship between the two is direct and proportional. The saving-investment theory is superior in that it shows that the actual relationship between the money supply and price level is neither direct nor proportional.

It is disequilibrium between saving and investment that leads to changes in the spent. If investment exceeds saving, income will increase which will raise aggregate expenditure,

output, employment and prices. The inverse will be the case when saving exceeds investment. Thus there is no direct relationship between the quantity of money and price level. As pointed out by Crowther, "The effect of a given change in M (quantity of money) on the price level is not a simple cause-and-effect relationship as the Quantity Theory supposed, but a most complex chain reaction."

Moreover, when the quantity of money increases, the price level does not rise proportionately. So long as there are unemployed resources in the economy, an increase in money income will not lead to a rise in the price-level if output increases proportionately to the increase in aggregate demand. It is only when the resources are fully employed that the price level will increase proportionately to the increase in the quantity of money.

# 4. Applicable in the Full Employment and Unemployment:

The quantity theory of money is based on the assumption of full employment that is why it establishes a direct and proportional relationship between the quantity of money and price level. The saving-investment theory is superior to it because it analyses the effect of money on the price level when there is unemployment in the economy.

# **5. Explains Short Run Changes:**

The saving-investment theory is more realistic than the quantity theory of money because it explains short run changes in the value of money (or price level), whereas the quantity theory of money explain the long-run changes. This is unrealistic because in the long run we are all dead.

# **6. Considers both Monetary and Real Factors:**

Again, the saving-investment theory is superior to the quantity theory of money in that it takes into consideration both the monetary and real factors in determining the value of money. Such factors as saving, investment, aggregate output are taken along-with the

quantity of money and aggregate expenditure. This makes the income theory better than the quantity theory of money.

# 7. Policy Implications:

The policy implications of the saving-investment theory are more realistic than the quaintly theory of money. The quantity theory of money concentrates exclusively on monetary policy. On the other hand, the saving-investment theory lays more emphasis on expenditure and income that affect economic activity more than the quantity of money. This fact has been proved by the dominance of income (fiscal) policy over the monetary policy since 1950s.

We may conclude with Crowther that the saving-investment theory "goes considerably nearer to the reality of things than the quantity theory. It reveals the fundamental tendencies of which the behaviour of money and prices is merely the surface of the symptom."

#### **UNIT IV**

## INFLATION AND DEFLATION

#### Inflation

In economics, inflation is a sustained increase in the general price level of goods and services in an economy over a period of time. When the price level rises, each unit of currency buys fewer goods and services; consequently, inflation reflects a reduction in the purchasing power per unit of money – a loss of real value in the medium of exchange and unit of account within the economy. A chief measure of price inflation is the inflation rate, the annualized percentage change in a general price index, usually the consumer price index, over time. The opposite of inflation is deflation.

Inflation affects economies in various positive and negative ways. The negative effects of inflation include an increase in the opportunity cost of holding money, uncertainty over future inflation which may discourage investment and savings, and if inflation were rapid enough, shortages of goods as consumers begin hoarding out of concern that prices will increase in the future. Positive effects include reducing the real burden of public and private debt, keeping nominal interest rates above zero so that central banks can adjust interest rates to stabilize the economy, and reducing unemployment due to nominal wage rigidity.

Economists generally believe that high rates of inflation and hyperinflation are caused by an excessive growth of the money supply. Views on which factors determine low to moderate rates of inflation are more varied. Low or moderate inflation may be attributed to fluctuations in real demand for goods and services, or changes in available supplies such as during scarcities. However, the consensus view is that a long sustained period of inflation is caused by money supply growing faster than the rate of economic growth. Inflation may also lead to an invisible tax in which the value of currency is

lowered in contrast with its actual reserve ultimately, leading individuals to hold devalued legal tender.

Today, most economists favor a low and steady rate of inflation. Low (as opposed to zero or negative) inflation reduces the severity of economic recessions by enabling the labor market to adjust more quickly in a downturn, and reduces the risk that a liquidity trap prevents monetary policy from stabilizing the economy. The task of keeping the rate of inflation low and stable is usually given to monetary authorities. Generally, these monetary authorities are the central banks that control monetary policy through the setting of interest rates, through open market operations, and through the setting of banking reserve requirements.

# **Inflation**

# Types, Causes and Effects

Inflation and unemployment are the two most talked-about words in the contemporary society.

These two are the big problems that plague all the economies.

Almost everyone is sure that he knows what inflation exactly is, but it remains a source of great deal of confusion because it is difficult to define it unambiguously.

# **Meaning of Inflation:**

Inflation is often defined in terms of its supposed causes. Inflation exists when money supply exceeds available goods and services. Or inflation is attributed to budget deficit financing. A deficit budget may be financed by the additional money creation. But the situation of monetary expansion or budget deficit may not cause price level to rise. Hence the difficulty of defining 'inflation'.

Inflation may be defined as 'a sustained upward trend in the general level of prices' and not the price of only one or two goods. G. Ackley defined inflation as 'a persistent and

appreciable rise in the general level or average of prices'. In other words, inflation is a state of rising prices, but not high prices.

It is not high prices but rising price level that constitute inflation. It constitutes, thus, an overall increase in price level. It can, thus, be viewed as the devaluing of the worth of money. In other words, inflation reduces the purchasing power of money. A unit of money now buys less. Inflation can also be seen as a recurring phenomenon.

While measuring inflation, we take into account a large number of goods and services used by the people of a country and then calculate average increase in the prices of those goods and services over a period of time. A small rise in prices or a sudden rise in prices is not inflation since they may reflect the short term workings of the market.

It is to be pointed out here that inflation is a state of disequilibrium when there occurs a sustained rise in price level. It is inflation if the prices of most goods go up. Such rate of increases in prices may be both slow and rapid. However, it is difficult to detect whether there is an upward trend in prices and whether this trend is sustained. That is why inflation is difficult to define in an unambiguous sense.

Let's measure inflation rate. Suppose, in December 2007, the consumer price index was 193.6 and, in December 2008, it was 223.8. Thus, the inflation rate during the last one year was

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

# **Types of Inflation:**

As the nature of inflation is not uniform in an economy for all the time, it is wise to distinguish between different types of inflation. Such analysis is useful to study the distributional and other effects of inflation as well as to recommend anti-inflationary policies. Inflation may be caused by a variety of factors. Its intensity or pace may be different at different times. It may also be classified in accordance with the reactions of the government toward inflation.

Thus, one may observe different types of inflation in the contemporary society:

#### A. On the Basis of Causes:

# (i) Currency inflation:

This type of inflation is caused by the printing of currency notes.

# (ii) Credit inflation:

Being profit-making institutions, commercial banks sanction more loans and advances to the public than what the economy needs. Such credit expansion leads to a rise in price level.

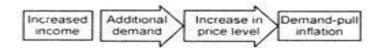
# (iii) Deficit-induced inflation:

The budget of the government reflects a deficit when expenditure exceeds revenue. To meet this gap, the government may ask the central bank to print additional money. Since pumping of additional money is required to meet the budget deficit, any price rise may the be called the deficit-induced inflation.

# (iv) Demand-pull inflation:

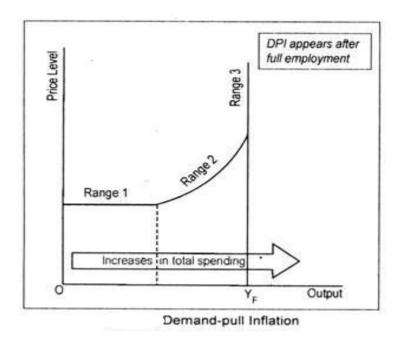
An increase in aggregate demand over the available output leads to a rise in the price level. Such inflation is called demand-pull inflation (henceforth DPI). But why does aggregate demand rise? Classical economists attribute this rise in aggregate demand to money supply. If the supply of money in an economy exceeds the available goods and

services, DPI appears. It has been described by Coulborn as a situation of "too much money chasing too few goods."



Keynesians hold a different argument. They argue that there can be an autonomous increase in aggregate demand or spending, such as a rise in consumption demand or investment or government spending or a tax cut or a net increase in exports (i.e., C+I+G+X-M) with no increase in money supply. This would prompt upward adjustment in price. Thus, DPI is caused by monetary factors (classical adjustment) and non-monetary factors (Keynesian argument).

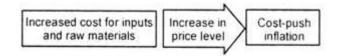
DPI can be explained in terms of Fig. 4.2, where we measure output on the horizontal axis and price level on the vertical axis. In Range 1, total spending is too short of full employment output, Y<sub>F</sub>. There is little or no rise in the price level. As demand now rises, output will rise. The economy enters Range 2, where output approaches towards full employment situation. Note that in this region price level begins to rise. Ultimately, the economy reaches full employment situation, i.e., Range 3, where output does not rise but price level is pulled upward. This is demand-pull inflation. The essence of this type of inflation is that "too much spending chasing too few goods."



# (v) Cost-push inflation:

Inflation in an economy may arise from the overall increase in the cost of production. This type of inflation is known as cost-push inflation (henceforth CPI). Cost of production may rise due to an increase in the prices of raw materials, wages, etc. Often trade unions are blamed for wage rise since wage rate is not completely market-determinded. Higher wage means high cost of production. Prices of commodities are thereby increased. A wage-price spiral comes into operation. But, at the same time, firms are to be blamed also for the price rise since they simply raise prices to expand their profit margins. Thus, we have two important variants of CPI wage-push inflation and profit-push inflation.

Anyway, CPI stems from the leftward shift of the aggregate supply curve:



If the speed of upward thrust in prices is slow but small then we have creeping inflation. What speed of annual price rise is a creeping one has not been stated by the economists. To some, a creeping or mild inflation is one when annual price rise varies between 2 p.c. and 3 p.c. If a rate of price rise is kept at this level, it is considered to be helpful for

economic development. Others argue that if annual price rise goes slightly beyond 3 p.c. mark, still then it is considered to be of no danger.

## (ii) Walking Inflation:

If the rate of annual price increase lies between 3 p.c. and 4 p.c., then we have a situation of walking inflation. When mild inflation is allowed to fan out, walking inflation appears. These two types of inflation may be described as 'moderate inflation'.

Often, one-digit inflation rate is called 'moderate inflation' which is not only predictable, but also keep people's faith on the monetary system of the country. Peoples' confidence get lost once moderately maintained rate of inflation goes out of control and the economy is then caught with the galloping inflation.

# (iii) Galloping and Hyperinflation:

Walking inflation may be converted into running inflation. Running inflation is dangerous. If it is not controlled, it may ultimately be converted to galloping or hyperinflation. It is an extreme form of inflation when an economy gets shattered."Inflation in the double or triple digit range of 20, 100 or 200 p.c. a year is labelled "galloping inflation".

# (iv) Government's Reaction to Inflation:

Inflationary situation may be open or suppressed. Because of anti-inflationary policies pursued by the government, inflation may not be an embarrassing one. For instance, increase in income leads to an increase in consumption spending which pulls the price level up.

If the consumption spending is countered by the government via price control and rationing device, the inflationary situation may be called a suppressed one. Once the government curbs are lifted, the suppressed inflation becomes open inflation. Open inflation may then result in hyperinflation.

# **Causes of Inflation**

Inflation is mainly caused by excess demand/ or decline in aggregate supply or output. Former leads to a rightward shift of the aggregate demand curve while the latter causes aggregate supply curve to shift leftward. Former is called demand-pull inflation (DPI), and the latter is called cost-push inflation (CPI). Before describing the factors, that lead to a rise in aggregate demand and a decline in aggregate supply, we like to explain "demand-pull" and "cost-push" theories of inflation.

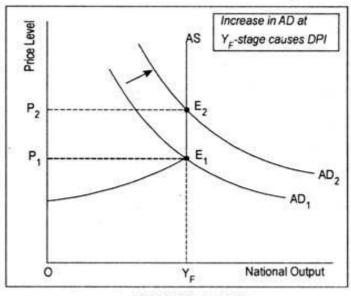
# (i) Demand-Pull Inflation Theory:

There are two theoretical approaches to the DPI—one is classical and other is the Keynesian.

According to classical economists or monetarists, inflation is caused by an increase in money supply which leads to a rightward shift in negative sloping aggregate demand curve. Given a situation of full employment, classicists maintained that a change in money supply brings about an equi-proportionate change in price level.

That is why monetarists argue that inflation is always and everywhere a monetary phenomenon. Keynesians do not find any link between money supply and price level causing an upward shift in aggregate demand.

According to Keynesians, aggregate demand may rise due to a rise in consumer demand or investment demand or government expenditure or net exports or the combination of these four components of aggreate demand. Given full employment, such increase in aggregate demand leads to an upward pressure in prices. Such a situation is called DPI. This can be explained graphically.



DPI: Shifts in AD Curve

Just like the price of a commodity, the level of prices is determined by the interaction of aggregate demand and aggregate supply. In Fig. 4.3, aggregate demand curve is negative sloping while aggregate supply curve before the full employment stage is positive sloping and becomes vertical after the full employment stage is reached.  $AD_1$  is the initial aggregate demand curve that intersects the aggregate supply curve AS at point  $E_1$ .

The price level, thus, determined is  $OP_1$ . As aggregate demand curve shifts to  $AD_2$ , price level rises to  $OP_2$ . Thus, an increase in aggregate demand at the full employment stage leads to an increase in price level only, rather than the level of output. However, how much price level will rise following an increase in aggregate demand depends on the slope of the AS curve.

## (ii) Causes of Demand-Pull Inflation:

DPI originates in the monetary sector. Monetarists' argument that "only money matters" is based on the assumption that at or near full employment excessive money supply will increase aggregate demand and will, thus, cause inflation.

An increase in nominal money supply shifts aggregate demand curve rightward. This enables people to hold excess cash balances. Spending of excess cash balances by them causes price level to rise. Price level will continue to rise until aggregate demand equals aggregate supply.

Keynesians argue that inflation originates in the non-monetary sector or the real sector. Aggregate demand may rise if there is an increase in consumption expenditure following a tax cut. There may be an autonomous increase in business investment or government expenditure. Government expenditure is inflationary if the needed money is procured by the government by printing additional money.

In brief, increase in aggregate demand i.e., increase in (C + I + G + X - M) causes price level to rise. However, aggregate demand may rise following an increase in money supply generated by the printing of additional money (classical argument) which drives prices upward. Thus, money plays a vital role. That is why Milton Friedman argues that inflation is always and everywhere a monetary phenomenon.

There are other reasons that may push aggregate demand and, hence, price level upwards. For instance, growth of population stimulates aggregate demand. Higher export earnings increase the purchasing power of the exporting countries. Additional purchasing power means additional aggregate demand. Purchasing power and, hence, aggregate demand may also go up if government repays public debt.

Again, there is a tendency on the part of the holders of black money to spend more on conspicuous consumption goods. Such tendency fuels inflationary fire. Thus, DPI is caused by a variety of factors.

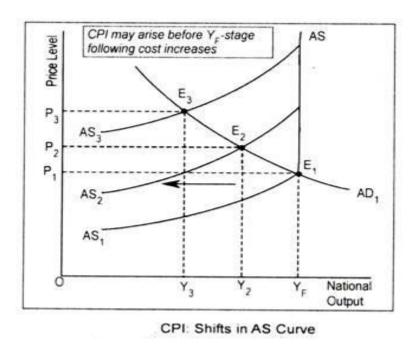
# (iii) Cost-Push Inflation Theory:

In addition to aggregate demand, aggregate supply also generates inflationary process. As inflation is caused by a leftward shift of the aggregate supply, we call it CPI.

CPI is usually associated with non-monetary factors. CPI arises due to the increase in cost of production. Cost of production may rise due to a rise in cost of raw materials or increase in wages.

However, wage increase may lead to an increase in productivity of workers. If this happens, then the AS curve will shift to the right- ward not leftward—direction. We assume here that productivity does not change in spite of an increase in wages.

Such increases in costs are passed on to consumers by firms by raising the prices of the products. Rising wages lead to rising costs. Rising costs lead to rising prices. And, rising prices again prompt trade unions to demand higher wages. Thus, an inflationary wage-price spiral starts. This causes aggregate supply curve to shift leftward.



This can be demonstrated graphically where  $AS_1$  is the initial aggregate supply curve. Below the full employment stage this AS curve is positive sloping and at full employment stage it becomes perfectly inelastic.

Intersection point  $(E_1)$  of  $AD_1$  and  $AS_1$  curves determine the price level  $(OP_1)$ . Now there is a leftward shift of aggregate supply curve to  $AS_2$ . With no change in aggregate demand, this causes price level to rise to  $OP_2$  and output to fall to  $OY_2$ . With the reduction

in output, employment in the economy declines or unemployment rises. Further shift in AS curve to  $AS_3$  results in a higher price level  $(OP_3)$  and a lower volume of aggregate output  $(OY_3)$ . Thus, CPI may arise even below the full employment  $(Y_F)$  stage.

# (iv) Causes of Cost-Push Inflation:

It is the cost factors that pull the prices upward. One of the important causes of price rise is the rise in price of raw materials. For instance, by an administrative order the government may hike the price of petrol or diesel or freight rate. Firms buy these inputs now at a higher price. This leads to an upward pressure on cost of production.

Not only this, CPI is often imported from outside the economy. Increase in the price of petrol by OPEC compels the government to increase the price of petrol and diesel. These two important raw materials are needed by every sector, especially the transport sector. As a result, transport costs go up resulting in higher general price level.

Again, CPI may be induced by wage-push inflation or profit-push inflation. Trade unions demand higher money wages as a compensation against inflationary price rise. If increase in money wages exceed labour productivity, aggregate supply will shift upward and leftward. Firms often exercise power by pushing prices up independently of consumer demand to expand their profit margins.

Fiscal policy changes, such as increase in tax rates also leads to an upward pressure in cost of production. For instance, an overall increase in excise tax of mass consumption goods is definitely inflationary. That is why government is then accused of causing inflation.

Finally, production setbacks may result in decreases in output. Natural disaster, gradual exhaustion of natural resources, work stoppages, electric power cuts, etc., may cause aggregate output to decline. In the midst of this output reduction, artificial scarcity of any goods created by traders and hoarders just simply ignite the situation.

Inefficiency, corruption, mismanagement of the economy may also be the other reasons. Thus, inflation is caused by the interplay of various factors. A particular factor cannot be held responsible for any inflationary price rise.

## **Effects of Inflation**

People's desires are inconsistent. When they act as buyers they want prices of goods and services to remain stable but as sellers they expect the prices of goods and services should go up. Such a happy outcome may arise for some individuals; "but, when this happens, others will be getting the worst of both worlds."

When price level goes up, there is both a gainer and a loser. To evaluate the consequence of inflation, one must identify the nature of inflation which may be anticipated and unanticipated. If inflation is anticipated, people can adjust with the new situation and costs of inflation to the society will be smaller.

In reality, people cannot predict accurately future events or people often make mistakes in predicting the course of inflation. In other words, inflation may be unanticipated when people fail to adjust completely. This creates various problems.

# One can study the effects of unanticipated inflation under two broad headings:

- (a) Effect on distribution of income and wealth; and
- (b) Effect on economic growth.

## (a) Effects of Inflation on Distribution of Income and Wealth:

During inflation, usually people experience rise in incomes. But some people gain during inflation at the expense of others. Some individuals gain because their money incomes rise more rapidly than the prices and some lose because prices rise more rapidly than their incomes during inflation. Thus, it redistributes income and wealth.

Though no conclusive evidence can be cited, it can be asserted that following categories of people are affected by inflation differently:

## (i) Creditors and debtors:

Borrowers gain and lenders lose during inflation because debts are fixed in rupee terms. When debts are repaid their real value declines by the price level increase and, hence, creditors lose. An individual may be interested in buying a house by taking loan of Rs. 7 lakh from an institution for 7 years.

The borrower now welcomes inflation since he will have to pay less in real terms than when it was borrowed. Lender, in the process, loses since the rate of interest payable remains unaltered as per agreement. Because of inflation, the borrower is given 'dear' rupees, but pays back 'cheap' rupees. However, if in an inflation-ridden economy creditors chronically loose, it is wise not to advance loans or to shut down business.

Never does it happen. Rather, the loan-giving institution makes adequate safeguard against the erosion of real value. Above all, banks do not pay any interest on current account but charges interest on loans.

## (ii) Bond and debenture-holders:

In an economy, there are some people who live on interest income—they suffer most. Bondholders earn fixed interest income: These people suffer a reduction in real income when prices rise. In other words, the value of one's savings decline if the interest rate falls short of inflation rate. Similarly, beneficiaries from life insurance programmes are also hit badly by inflation since real value of savings deteriorate.

# (iii) Investors:

People who put their money in shares during inflation are expected to gain since the possibility of earning of business profit brightens. Higher profit induces owners of firm to distribute profit among investors or shareholders.

# (iv) Salaried people and wage-earners:

Anyone earning a fixed income is damaged by inflation. Sometimes, unionised worker succeeds in raising wage rates of white-collar workers as a compensation against price rise. But wage rate changes with a long time lag. In other words, wage rate increases always lag behind price increases. Naturally, inflation results in a reduction in real purchasing power of fixed income-earners.

On the other hand, people earning flexible incomes may gain during inflation. The nominal incomes of such people outstrip the general price rise. As a result, real incomes of this income group increase.

# (v) Profit-earners, speculators and black marketers:

It is argued that profit-earners gain from inflation. Profit tends to rise during inflation. Seeing inflation, businessmen raise the prices of their products. This results in a bigger profit. Profit margin, however, may not be high when the rate of inflation climbs to a high level.

However, speculators dealing in business in essential commodities usually stand to gain by inflation. Black marketers are also benefited by inflation.

Thus, there occurs a redistribution of income and wealth. It is said that rich becomes richer and poor becomes poorer during inflation. However, no such hard and fast generalisation can be made. It is clear that someone wins and someone loses during inflation.

These effects of inflation may persist if inflation is unanticipated. However, the redistributive burdens of inflation on income and wealth are most likely to be minimal if inflation is anticipated by the people. With anticipated inflation, people can build up their strategies to cope with inflation.

If the annual rate of inflation in an economy is anticipated correctly people will try to protect them against losses resulting from inflation. Workers will demand 10 p.c. wage increase if inflation is expected to rise by 10 p.c.

Similarly, a percentage of inflation premium will be demanded by creditors from debtors. Business firms will also fix prices of their products in accordance with the anticipated price rise. Now if the entire society "learn to live with inflation", the redistributive effect of inflation will be minimal.

However, it is difficult to anticipate properly every episode of inflation. Further, even if it is anticipated it cannot be perfect. In addition, adjustment with the new expected inflationary conditions may not be possible for all categories of people. Thus, adverse redistributive effects are likely to occur.

Finally, anticipated inflation may also be costly to the society. If people's expectation regarding future price rise become stronger they will hold less liquid money. Mere holding of cash balances during inflation is unwise since its real value declines. That is why people use their money balances in buying real estate, gold, jewellery, etc. Such investment is referred to as unproductive investment. Thus, during inflation of anticipated variety, there occurs a diversion of resources from priority to non-priority or unproductive sectors.

## (b) Effect on Production and Economic Growth:

Inflation may or may not result in higher output. Below the full employment stage, inflation has a favourable effect on production. In general, profit is a rising function of the price level. An inflationary situation gives an incentive to businessmen to raise prices of their products so as to earn higher volume of profit. Rising price and rising profit encourage firms to make larger investments.

As a result, the multiplier effect of investment will come into operation resulting in a higher national output. However, such a favourable effect of inflation will be temporary if wages and production costs rise very rapidly.

Further, inflationary situation may be associated with the fall in output, particularly if inflation is of the cost-push variety. Thus, there is no strict relationship between prices and output. An increase in aggregate demand will increase both prices and output, but a supply shock will raise prices and lower output.

Inflation may also lower down further production levels. It is commonly assumed that if inflationary tendencies nurtured by experienced inflation persist in future, people will now save less and consume more. Rising saving propensities will result in lower further outputs.

One may also argue that inflation creates an air of uncertainty in the minds of business community, particularly when the rate of inflation fluctuates. In the midst of rising inflationary trend, firms cannot accurately estimate their costs and revenues. That is, in a situation of unanticipated inflation, a great deal of risk element exists.

It is because of uncertainty of expected inflation, investors become reluctant to invest in their business and to make long-term commitments. Under the circumstance, business firms may be deterred in investing. This will adversely affect the growth performance of the economy.

However, slight dose of inflation is necessary for economic growth. Mild inflation has an encouraging effect on national output. But it is difficult to make the price rise of a creeping variety. High rate of inflation acts as a disincentive to long run economic growth. The way the hyperinflation affects economic growth is summed up here. We know that hyperinflation discourages savings.

A fall in savings means a lower rate of capital formation. A low rate of capital formation hinders economic growth. Further, during excessive price rise, there occurs an increase in unproductive investment in real estate, gold, jewellery, etc. Above all, speculative

businesses flourish during inflation resulting in artificial scarcities and, hence, further rise in prices.

Again, following hyperinflation, export earnings decline resulting in a wide imbalances in the balance of payment account. Often galloping inflation results in a 'flight' of capital to foreign countries since people lose confidence and faith over the monetary arrangements of the country, thereby resulting in a scarcity of resources. Finally, real value of tax revenue also declines under the impact of hyperinflation. Government then experiences a shortfall in investible resources.

Thus economists and policymakers are unanimous regarding the dangers of high price rise. But the consequences of hyperinflation are disastrous. In the past, some of the world economies (e.g., Germany after the First World War (1914-1918), Latin American countries in the 1980s) had been greatly ravaged by hyperinflation.

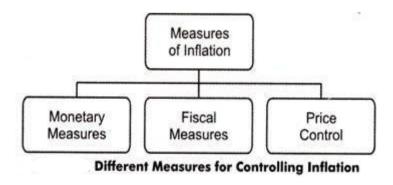
# **Measures for Controlling Inflation**

Inflation is considered to be a complex situation for an economy. If inflation goes beyond a moderate rate, it can create disastrous situations for an economy; therefore is should be under control.

It is not easy to control inflation by using a particular measure or instrument.

The main aim of every measure is to reduce the inflow of cash in the economy or reduce the liquidity in the market.

The different measures used for controlling inflation are shown in Figure



The different measures (as shown in Figure) used for controlling inflation are explained below.

## 1. Monetary Measures:

The government of a country takes several measures and formulates policies to control economic activities. Monetary policy is one of the most commonly used measures taken by the government to control inflation.

In monetary policy, 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. In such a situation, individuals prefer to save money instead of investing in new ventures.

This would reduce money supply in the market, which, in turn, 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:

## (a) Rise in Bank Rate:

Refers to one of the most widely used measure taken by the central bank to control inflation.

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.

The main reasons for reduction in total expenditure of individuals are as follows;

# (i) Making the borrowing of money costlier:

Refers to the fact that with the rise in the bank rate by the central bank increases the interest rate on loans and advances by commercial banks. This makes the borrowing of money expensive for general public.

Consequently, individuals postpone their investment plans and wait for fall in interest rates in future. The reduction in investments results in the decreases in the total spending and helps in controlling inflation.

# (ii) Creating adverse situations for businesses:

Implies that increase in bank rate has a psychological impact on some of the businesspersons. They consider this situation adverse for carrying out their business activities. Therefore, they reduce their spending and investment.

# (iii) Increasing the propensity to save:

Refers to one of the most important reason for reduction in total expenditure of individuals. It is a well-known fact that individuals generally prefer to save money in inflationary conditions. As a result, the total expenditure of individuals on consumption and investment decreases.

## (b) Direct Control on Credit Creation:

Constitutes the major part of monetary policy.

The central bank directly reduces the credit control capacity of commercial banks by using the following methods

# (i) Performing Open Market Operations (OMO):

Refers to one of the important method 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.

In this way, 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.

# (ii) Changing Reserve Ratios:

Involves increase or decrease in reserve ratios by the central bank 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.

#### 2. Fiscal Measures:

inflation. The two main components of fiscal policy are government revenue and government expenditure. In fiscal policy, the government controls inflation either by reducing private spending or by decreasing government expenditure, or by using both. It reduces private spending by increasing taxes on private businesses. When private spending is more, the government reduces its expenditure to control inflation. However, in present scenario, reducing government expenditure is not possible because there may be certain on-going projects for social welfare that cannot be postponed.

Apart from monetary policy, the government also uses fiscal measures to control

Besides this, the government expenditures are essential for other areas, such as defense, health, education, and law and order. In such a case, reducing private spending is more preferable rather than decreasing government expenditure. When the government reduces private spending by increasing taxes, individuals decrease their total expenditure.

For example, if direct taxes on profits increase, the total disposable income would reduce. As a result, the total spending of individuals decreases, which, in turn, reduces money supply in the market. Therefore, at the time of inflation, the government reduces its expenditure and increases taxes for dropping private spending.

## 3. Price Control:

Another method for ceasing inflation is preventing any further rise in the prices of goods and services. In this method, inflation is suppressed by price control, but cannot be controlled for the long term. In such a case, the basic inflationary pressure in the economy is not exhibited in the form of rise in prices for a short time. Such inflation is termed as suppressed inflation.

The historical evidences have shown that price control alone cannot control inflation, but only reduces the extent of inflation. For example, at the time of wars, the government of different countries imposed price controls to prevent any further rise in the prices. However, prices remain at peak in different economies. This was because of the reason that inflation was persistent in different economies, which caused sharp rise in prices. Therefore, it can be said inflation cannot be ceased unless its cause is determined.

#### **Deflation**

#### Types, Causes and Effects

#### What Is Deflation

Many people accept inflation as a fact of life. However, under certain economic situations, the opposite phenomenon actually takes place, and is known as "deflation." Deflation is the reduction of prices of goods, and although deflation may seem like a good thing when you're standing at the checkout counter, it's not. Rather, deflation is an indication that economic conditions are deteriorating. Deflation is usually associated with significant unemployment, which is only corrected after wages drop considerably.

Furthermore, businesses' profits drop significantly during periods of deflation, making it more difficult to raise additional capital to expand and develop new technologies.

"Deflation" is often confused with "disinflation." While deflation represents a decrease in the prices of goods and services throughout the economy, disinflation represents a situation where inflation increases at a slower rate. However, disinflation does not usually precede a period of deflation. In fact, deflation is a rare phenomenon that does not occur in the course of a normal economic cycle, and therefore, investors must recognize it as a sign that something is severely wrong with the state of the economy.

#### What Causes Deflation?

Deflation can be caused by a number of factors, all of which stem from a shift in the supply-demand curve. Remember, the prices of *all* goods and services are heavily affected by a change in the supply and demand, which means that if demand drops in relation to supply, prices will have to drop accordingly. Also, a change in the supply and demand of a nation's currency plays an instrumental role in setting the prices of the country's goods and services.

Although there are many reasons why deflation may take place, the following causes seem to play the largest roles:

# 1. Change in Structure of Capital Markets

When many different companies are selling the same goods or services, they will typically lower their prices as a means to compete. Often, the capital structure of the economy will change and companies will have easier access to debt and equity markets, which they can use to fund new businesses or improve productivity.

There are multiple reasons why companies will have an easier time raising capital, such as declining interest rates, changing banking policies, or a change in investors' aversion to risk. However, after they have utilized this new capital to increase productivity, they

are going to have to reduce their prices to reflect the increased supply of products, which can result in deflation.

#### 2. Increased Productivity

Innovative solutions and new processes help increase efficiency, which ultimately leads to lower prices. Although some innovations only affect the productivity of certain industries, others may have a profound effect on the entire economy.

For example, after the Soviet Union collapsed in 1991, many of the countries that formed as a result struggled to get back on track. In order to make a living, many citizens were willing to work for very low prices, and as companies in the United States outsourced work to these countries, they were able to significantly reduce their operating expenses and bolster productivity. Inevitably, this increased the supply of goods and decreased their cost, which led to a period of deflation near the end of the 20th century.

# 3. Decrease in Currency Supply

As the currency supply decreases, prices will decrease so that people can afford goods. How can currency supplies decrease? One common reason is through central banking systems.

For instance, when the Federal Reserve was first created, it considerably contracted the money supply of the United States. In the process, this led to a severe case of deflation in 1913. Also, in many economies, spending is often completed on credit. Clearly, when creditors pull the plug on lending money, customers will spend less, forcing sellers to lower their prices to regain sales.

## 4. Austerity Measures

Deflation can be the result of decreased governmental, business, or consumer spending, which means government spending cuts can lead to periods of significant

deflation. For example, when Spain initiated austerity measures in 2010, pre-existing deflation began to spiral out of control.

## 5. Deflationary Spiral

Once deflation has shown its ugly head, it can be very difficult to get the economy under control for a number of reasons. First of all, when consumers start cutting spending, business profits decrease. Unfortunately, this means that businesses have to reduce wages and cut their own purchases. In turn, this short-circuits spending in other sectors, as other businesses and wage-earners have less money to spend. As horrible as this sounds, it continues to get worse and the cycle can be very difficult to break.

#### **Effects of Deflation**

Deflation can be compared to a terrible winter: The damage can be intense and be experienced for many seasons afterwards. Unfortunately, some nations never fully recover from the damage caused by deflation. Hong Kong, for example, never recovered from the deflationary effects that gripped the Asian economy in 2002.

Deflation may have any of the following impacts on an economy:

#### 1. Reduced Business Revenues

Businesses must significantly reduce the prices of their products in order to stay competitive. Obviously, as they reduce their prices, their revenues start to drop. Business revenues frequently fall and recover, but deflationary cycles tend to repeat themselves multiple times.

Unfortunately, this means businesses will need to increasingly cut their prices as the period of deflation continues. Although these businesses operate with improved production efficiency, their profit margins will eventually drop, as savings from material costs are offset by reduced revenues.

## 2. Wage Cutbacks and Layoffs

When revenues start to drop, companies need to find ways to reduce their expenses to meet their bottom line. They can make these cuts by reducing wages and cutting positions. Understandably, this exacerbates the cycle of inflation, as more would-be consumers have less to spend.

# 3. Changes in Customer Spending

The relationship between deflation and consumer spending is complex and often difficult to predict. When the economy undergoes a period of deflation, customers often take advantage of the substantially lower prices. Initially, consumer spending may increase greatly; however, once businesses start looking for ways to bolster their bottom line, consumers who have lost their jobs or taken pay cuts must start reducing their spending as well. Of course, when they reduce their spending, the cycle of deflation worsens.

## 4. Reduced Stake in Investments

When the economy goes through a series of deflation, investors tend to view <u>cash</u> as one of their best possible investments. Investors will watch their money grow simply by holding onto it. Additionally, the interest rates investors earn often decrease significantly as central banks attempt to fight deflation by reducing interest rates, which in turn reduces the amount of money they have available for spending.

In the meantime, many other investments may yield a negative return or are highly volatile, since investors are scared and companies aren't posting profits. As investors pull out of stocks, the stock market inevitably drops.

#### 5. Reduced Credit

When deflation rears its head, financial lenders quickly start to pull the plugs on many of their lending operations for a variety of reasons. First of all, as assets such as houses decline in value, customers cannot back their debt with the same collateral. In the event a borrower is unable to make their debt obligations, the lenders will be unable to recover their full investment through foreclosures or property seizures.

Also, lenders realize the financial position of borrowers is more likely to change as employers start cutting their workforce. Central banks will try to reduce interest rates to encourage customers to borrow and spend more, but many of them will still not be eligible for loans.

## **Control of Deflation**

Deflation adversely affects the level of production, business activity and employment and, therefore, it is equally essential to control it. During deflation the bank rate is lowered and securities are purchased through the open market operations and the volume of money and credit is expanded in every possible way. This policy is known as cheap-money policy. The idea is that with an increase in the quantum of money and credit, there will be increase in investment, production and employment. But these monetary measures alone may prove inadequate.

Mere expansion of money and credit may fail to revive economic activity, for the entrepreneurs may not be willing to expand investment (as anticipated) for want of necessary optimism. So, these monetary measures to combat deflation have to be combined with the fiscal measures like increased expenditure through deficit financing, tax concession and public works programmes, thereby providing jobs to unemployed people and generating the necessary effective demand needed for recovery.

These monetary and fiscal measures will prove more effective if combined with other measures, like the price support programmes, (i.e., to prevent the prices from falling below a certain level), lowering of wages and other costs to bring about adjustment between the price-cost structure. The best remedy to fight deflation is to have a ready programme of public works to be resorted to, as and when unemployment appears.

#### **UNIT V**

#### **BANKING**

## **Meaning of Banking**

A bank is a financial institution licensed to receive deposits and make loans. Banks may also provide financial services, such as wealth management, currency exchange and safe deposit boxes. There are two types of banks: commercial/retail banks and investment banks. In most countriesbanks are regulated by the national government or central bank.

#### Characteristics / Features of a Bank

## 1. Dealing in Money

Bank is a financial institution which deals with other people's money i.e. money given by depositors.

## 2. Individual / Firm / Company

A bank may be a person, firm or a company. A banking company means a company which is in the business of banking.

## 3. Acceptance of Deposit

A bank accepts money from the people in the form of deposits which are usually repayable on demand or after the expiry of a fixed period. It gives safety to the deposits of its customers. It also acts as a custodian of funds of its customers.

## 4. Giving Advances

A bank lends out money in the form of loans to those who require it for different purposes.

# 5. Payment and Withdrawal

A bank provides easy payment and withdrawal facility to its customers in the form of cheques and drafts, It also brings bank money in circulation. This money is in the form of cheques, drafts, etc.

## 6. Agency and Utility Services

A bank provides various banking facilities to its customers. They include general utility services and agency services.

#### 7. Profit and Service Orientation

A bank is a profit seeking institution having service oriented approach.

# 8. Ever increasing Functions

Banking is an evolutionary concept. There is continuous expansion and diversification as regards the functions, services and activities of a bank.

## 9. Connecting Link

A bank acts as a connecting link between borrowers and lenders of money. Banks collect money from those who have surplus money and give the same to those who are in need of money.

# 10. Banking Business

A bank's main activity should be to do business of banking which should not be subsidiary to any other business.

## 11. Name Identity

A bank should always add the word "bank" to its name to enable people to know that it is a bank and that it is dealing in money.

## **Banking System in India**

Banking is defined as the accepting purpose of lending or investment of deposits, money from the public, repayable on demand or otherwise and withdrawable by cheque, draft, order or otherwise — this definition is given in Indian Banking Regulation Act (1949). From this definition, we can say that a bank has two main features: (1) the bank accepts deposits of money which are withdrawable by cheques, (2) the bank uses the

deposits for lending. To be recognised as bank the institution must use the deposits to give loans to the general public.

If an institution accepts deposits withdraw able by cheques but uses the deposits for its own purpose, such an institution cannot be regarded as a bank. Post office, savings banks are not banks, because they accept chequable deposits but do not sanction loans. In the same way. Lie is not bank because it does not grant loans in general. LITI, LIC, IDBI etc. are regarded as the non-banking financial institutions as they do not create money.

## **Types of Banks:**

Some important types of banks in countries like India are discussed below:

## (a) Organized and unorganized banking:

Indian banking system can broadly be classified into two categories:

- (i) Organized banking and
- (ii) Unorganized banking.

That part of Indian banking system which does not fall under the control of our central bank (i.e. Reserve Bank of India) is called as un-organised banking. For example, Indigenous banks. Whereas, organized banking system refers to that part of the Indian banking system which is under the influence and control of the Reserve Bank of India. For example, Commercial Banks, Industrial Banks, Agricultural Banks.

#### (b) Scheduled and Non-scheduled banks:

Under the Reserve Bank of India Act, 1939, banks were classified as scheduled banks and non scheduled banks.. The scheduled banks are those which are entered in the second schedule of RBI Act, 1939. Scheduled banks are those banks an which have a paid up capital and reserves of aggregate value of not less than Rs 5 lakhs and which satisfy RBI. All Commercial Banks, Regional Rural Banks, State Cooperative Banks are scheduled banks. On the other hand, non-schedule banks are those banks whose total paid up capital

is less than Rs 5 lakh and RBI has no specific control over these banks. These banks are not included in the second schedule of RBI Act, 1934.

## (c) Indigenous Bankers:

From very ancient days indigenous banking as different from the modern western banking has been organized in the form of family or individual business. They have been called by various names in different parts of the country as Shroffs, Sethus, Sahukars, Mahajans, Chettis and so on. They vary in their size from petty money lenders substantial shroffs.

#### (d) Central Bank:

In each country there exists central bank which controls a country's money supply and monetary policy. It acts as a bank to other banks, and a lender of last resort. India Reserve Bank of India (RBI) is the Central Bank.

#### (e) Commercial Bank:

A bank dealing with general public, accepting deposits from making loans to large numbers of households and firms. Through the process of accepting deposits and lending, commercial banks create credit in the economy. Some examples (commercial banks in India are State Bank India (SBI), Punjab National Bank (PNB) etc.

#### (f) Development Banks:

Development banks are specialised financial institutions. To promote economic development, development banks provide medium term and long term loans the entrepreneurs at relatively low rate o interest rates. Some examples of development banks in India are Industrial Development Bank of India (IDBI), Industrial Financial Corporation of India (IFCI), Industrial Credit and Investment Corporation of India (ICICI) etc.

## (g) Co-Operative Banks:

Co-operative banks are organised under the provisions of the Co-operative societies law of the state. These banks were originally set up in India to provide credit to the farmers at cheaper rates. However, the co-operative banks function also in the urban sectors.

## (h) Land Mortgage Banks:

The primary objective of these banks is to provide long-term loans to farmers at low rates in matters related to land, The land mortgage banks are also known as the Land Development Banks.

## (i) Regional Rural Banks:

Regional Rural Banks (RRBs) are established in the rural areas to meet the needs of the weaker section of the rural population.

# (j) National Bank for Agricultural and Rural Development (NABARD):

This bank was established in 1982 in India in view of providing the rural credit to the farmers. Actually, it is an apex institution which coordinates the functioning of different financial institutions working in the field of rural credit. NABARD has been making continuous efforts through its micro-finance programme or improving the access of the rural poor to formal institutional credit. The self help group (SHG) — Bank linkage programme was introduced in 1992 as a mechanism to provide financial services to the rural poor people on a sustainable basis.

## (k) Exchange Banks:

These banks are engaged in buying and selling foreign exchange. These banks help the growth of international trade.

#### (i) Exim Bank:

It is popularly known as 'Export Import Bank'. Such banks provide long term financial assistance to the exporters and importers.

#### UNIT BANKING

Unit banks are independent, one-office banks. Their operations are confined in general to a single office. Some unit banks have grown to large sizes but they operate under severe restrictions which limit or prohibit the establishment of branches. The unit banks operate in small towns and cities and are called country bank and city banks respectively. All unit banks are linked together by a correspondent bank relationship. A country bank has deposits in city banks, and banks have deposits in branch banks in the same and other big cities like New York and Chicago.

#### MERITS OF UNIT BANKING

The unit banks, being independent and one-office banks, possess certain advantages:

- 1. Efficient Working. A unit bank works very efficiently and provides prompt service to its customers. For, like a departmental store in a locality, it has competitors in other unit banks.
- 2. Personal Relation. Since its organizer and other staff are generally local people, they have personal relations which help in mobilizing larger resource for the bank.
- Quick Decisions. They are able to meet the financial requirements of the people promptly and efficiently. There is always on-the-spot decision-making by the bank management.
- 4. Less Irregularities. There are less change of fraud and irregularities under the unit banking because of the close supervision and control of the management.
- Local Utilization of Deposits. Local deposits are utilized by a unit bank on the development of the same locality and they are not to be transferred to other towns as is done under branch banking.
- 6. Economies. The unit banking operating being on a small scale, they are free from the diseconomies which arise in large scale banking operations.

- 7. Prevention of Monopoly. Unit banking helps in the prevention of monopoly banking.
- 8. Enjoy Merits of branch Banking. The unit banks also enjoy the advantages of branch banking as they are connected with big banks through correspondent banking system in the USA.

#### **DEMERITS OF UNIT BANKING**

Despite these merits, unit banking suffers from certain disadvantages:

1. Failure to spread risks.

The unit banking system suffers from its failure to spread risks. As the unit banking operation are location in a particular are, the failure of a big party the lone in time may bring disaster to the bank.

#### 2. Limited Resources.

Unit bank has another disadvantages that it has limited resources at it disposal. So in the event of a financial or economic crises, if its depositors start withdrawing their money, the bank fails. This is what actually happened in the USA during the Great Depression of 1930s when 5000 banks failed and an additional 1200 were absorbed by larger bank.

- 3. Non-diversified Services. The unit bank cannot provide diversified banking services to its customers because of its inability to establish branches and higher costs. For example, businessman may prefer a branch of their city bank in the local business center to facilitate their business transaction.
- 4. No Economic or Large Operation. The unit banking system cannot have the advantages of large scale banking in that it cannot recruit more efficient and highly paid staff, and cannot enjoy the economics of large scale and intensive specialization and division of labour.

- 5. Lack of fund Mobility. An important argument against the unit banking system that there is lack of mobility of funds within the country. The unit banks do not attract funds from outside their areas. On the other hand, there is every likelihood of local funds flowing out of the large money markets in pursuit of higher interest rates. This is because the unit bank are unable to pay high interest rates.
- 6. Non-Economic Consideration. A unit bank may not advance loans to a few local businessmen who may not be creditworthy.
- 7. Backward Areas. Since a unit bank has limited resources at its disposal, it cannot be opened in backward towns. As a result, such areas continue to remain backward.
- 8. Unhealthy Competition. As every company state a unit bank in a large down, it leads to unhealthy competition among different unit banks with the result that very few survive in the long run.
- 9. Remittance of funds. As a unit bank has no branches at other downs, it has to depend upon the correspondent banks for remittance of funds. This is very expensive.
  These demerits have led to modification of the banking laws in the USA whereby branch banking has been permitted in a number of states, though branch banking across state boundaries is still prohibited.

# **BRANCH BANKING**

Branch banking is the most prevalent banking system in the majority of countries. Under this system, a big bank has a number of branches in different parts of the country and even many branches within a cosmopolitan city like Mumbai, Kolkata, Chennai or New Dew Delhi. Small commercial banks also carry on branch banking operations within a state or region.

Branch Banking is still an integral part of Indian banking system as most Indians still believe in cash transactions and prefer to visit banks in person for routine banking

operations. Bank branches are the face of the banks where customers can visit and talk to the officials for getting better insights into new policies, investment schemes, other banking services etc. On top of it, the personal touch in every service leaves a great impact on the minds of customers. However, banking in India has changed its facets and ways of doing business over the years especially after the onslaught of technology and its manifestations. People have started to drift towards latest modes of banking like e-banking, mobile-banking etc. but the acceptance percentage is low as compared to other countries. These innovations hold promising future and branches have to continually evolve to remain relevant in coming times.

#### **Definition of Branch Banking**

Branch Banking has been defined under the provisions of Section 23 of the Banking Regulation Act, 1949 that banks can either open new branches or shift the location of existing branches. The banks have to seek a prior approval of RBI to open a new branch in India or abroad or in the same city or village where a branch already operates. RBI will grant such permission after it is satisfied about the financial condition of the demanding bank, robustness of its management, capital structure and general public interest behind such a move.

The Banking Regulations Act, 1949, defines a 'branch' or 'branch office' of a banking company as a place where bank deposits are received, cheques cashed, money lent, any or all banking services are carried out. These exclude the bank call centres as they are typically calling facilities which do not have any customer interaction. A branch will include a full-fledged specialised branch, a satellite or mobile office, an extension counter, administrative office, control office, service branch, credit card centre etc.

## **Relevance of Branch Banking**

Branch banking has a lot of importance in India as it makes banking possible for people living in rural and remote areas. This is a true source of inclusive growth. The success of Pradhan Mantri Jan Dhan Yojana has been possible due to extensive branch networks of various banks. Branch banking makes management more responsive and efficient over centralised banking operations. Also, the risk is well spread across the branches and no single office has to suffer. This helps banks to offer more securities and investment options to its customers. Also, due to the wide geographic spread, a broader customer base, deposits used in one branch can be used profitably used as loans or investments in other branches. This type of banking system can easily reach people in backward areas. There are some negative points too which branch system faces like delays in decision-making due to limited powers of branches, influenced by local political leaders or administration etc.

#### MERITS OF BRANCH BANKING

The branches banking system has many advantages which make this system superior to the unit banking system. Rapid growth and wide popularity of branch banking system in the 20th century are due to various advantages as discussed below.

## 1. Economies of Large Scale Operations:

Under the branch banking system, the bank with a number of branches possesses huge financial resources and enjoys the benefits of large-scale operations,

- (a) Highly trained and experienced staff is appointed which increases the efficiency of management,
- (b) Division of labour is introduced in the banking operations which ensures greater economy in the working of the bank. Right persons are appointed at the right place and specialisation increases,
- (c) Funds are made available liberally and at cheaper rates,

- (d) Foreign exchange business is done economically,
- (e) Large financial resources and wider geographical coverage increases public confidence in the banking system.

## 2. Spreading of Risk:

Another advantage of the branch banking system is the lesser risk and greater capacity to meet risks,

- (a) Since there is geographical spreading and diversification of risks, the possibility of the failure of the bank is remote,
- (b) The losses incurred by some branches may be offset by the profits earned by other branches,
- (c) Large resources of branch banks increase their ability to face any crisis.

## 3. Economy in Cash Reserves:

Under the branch banking system, a particular branch can operate without keeping large amounts of idle reserves. In time of the need, resources can be transferred from one branch to another.

## 4. Diversification on Deposits and Assets:

There is greater diversification of both deposits and assets under branch banking system because of wider geographical coverage,

- (a) Deposits are received from the areas where savings are in plenty,
- (b) Loans are extended in those areas where funds are scarce and interest rates are high. The choice of securities and investments is larger in this system which increases the safety and liquidity of funds.

# 5. Cheap Remittance Facilities:

Since bank branches are spread over the whole country, it is easier and cheaper to transfer funds from one place to another. Inter-branch indebtedness is more easily adjusted than inter-bank indebtedness.

#### 6. Uniform Interest Rates:

Under branch banking system, mobility of capital increases, which in turn, brings about equality in interest rates. Funds are transferred from areas with excessive demand for money to areas with deficit demand for money. As a result, the uniform rate of interest prevails in the whole area; it is prevented from rising in the excessive demand area and from falling in the deficit demand area.

## 7. Proper Use of Capital:

There is proper use of capital under the branch banking system. If a branch has excess reserves, but no opportunities for investment, it can transfer the resources to other branches which can make most profitable use of these resources.

#### 8. Better Facilities to Customers:

The customers get better and greater facilities under the branch banking system. It is because of the small number of customers per branch and the increased efficiency achieved through large scale operations.

# 9. Banking Facilities in Backward Areas:

Under the branch banking system, the banking facilities are not restricted to big cities. They can be extended to small towns and rural as well as underdeveloped areas,.

Thus, this system helps in the development of backward regions of the country.

#### 10. Effective Control:

Under the branch banking system, The Central bank than have a more efficient control over the banks because it has to deal only with few big banks and nor with each individual branch. This ensures better implementation of monetary policy.

## **Disadvantages of Branch Banking**

Following are the main disadvantages and limitations of branch banking system:

## 1. Problem of Management:

Under the branch banking system a number of difficulties as regards management, supervision and control arise:

- (a) since the management of the bank gets concentrated at the head office, the managers can afford to be lax and indulgent in their duties and are often involved in serious irregularities while using the funds.
- (b) Since the branch manager has to seek permission from the head office on each and every matter, this results in unnecessary delay and red-tapism in the banking business.

## 2. Lack of Initiative:

Branch managers generally lack initiative on all-important matters; they cannot take independent decisions and have to wait for. The clearance signal from the head office.

## 3. Monopolistic Tendencies:

Branch banking encourages monopolistic tendencies in the banking system. A few big banks dominate and control the whole banking system of the country through their branches. This can lead to the concentration of resources into a few hands.

# 4. Regional Imbalances:

Under branch banking system, the financial resources collected in the smaller and backward regions are transferred to the bigger industrial centres. This encourages regional imbalances in the country.

## **5. Adverse Linkage Effect:**

Under branch banking system, the losses and weaknesses of some branches also have their effect on other branches of the bank.

#### 6. Inefficient Branches:

In this system, the weak and unprofitable branches continue to operate under the protection cover of the large and more profitable branches.

#### 7. Other Defects:

Other defects of branch banking system arc as follows:

- (a) Preferential treatment is given to the branches near the head office,
- (b) Higher interest rates are charged in the developed area to compensate for the lower rates charged in the backward areas,
- (c) There is concentration and unhealthy competition among the branches of different banks in big cities,
- (d) Many difficulties are faced when a bank opens branches in foreign countries.

## **Group Banking**

Group banking is part of the USA banking system. It is a type of multiple office banking consisting of two or more banks under the control of a holding company, which itself may or may not be a bank. The term "bank holding Company" is based on 25 per cent ownership or control of two or more banks.

The holding company is called the parent company and the banks under the parent company are called operating companies. The parent company controls and manages the operating banks under the group but each bank continues to keep its separate entity or name. The parent company may also be an operating bank.

## **Merits of Group Banking:**

The group banking system has certain advantages:

## 1. Pooling of Resources:

The parent company pools the resources of the group and helps the group banks to provide large loans and advances.

#### 2. Do not need large Cash Reserves:

The banks in the group need not keep large cash reserves for they can transfer funds to each other when the need arises.

## 3. Increase in Efficiency:

The efficiency of the group increases when the parent company provides such specialised services as research, advice on investments, loans and legal matters to all the banks in the group.

## 4. Economies of Large Operations:

The group also gains from the economies of large scale banking operations when the parent company advertises, makes bulk purchases, and hires the services of experts on behalf of the banks in the group.

## 5. No Mergers:

As already noted above, under the group banking system the operating companies do not merge with the parent company and continue to keep their separate entities but benefit from all the advantages of a large scale organisation.

# 6. No Unhealthy Competition:

Group banking avoids unhealthy competition among banks when they are under one holding company.

# **Demerits of Group Banking:**

Despite the above merits, the group banking system suffers from certain disadvantages:

## 1. Monopoly Banking:

The group banking system is a step towards monopoly banking which is not healthy from the economic view-point.

## 2. Inefficient System:

The operating banks may not follow the guidelines and policies laid down by the parent company from time to time. This may lead to inefficiency.

#### 3. Chain Reaction:

If the business of one member declines, it may adversely affect the business of other members of the group.

#### 4. Diversion of Funds:

If the parent company is not an operating banking company, it may divert the funds of the group in furthering its own interests. This may prove harmful for the entire operating group which may be starved of funds and ultimately bring disaster to the group.

# **Chain Banking**

Chain banking is also a USA banking system. It is a banking system where the same individual or group of individuals controls two or more banks, as against control by a holding company under group banking. This is done by stock ownership in two or more banks.

Stockholders directly or through their nominees exercise control of competing banks. The chain banking system possesses almost the same advantages and disadvantages as that of the group banking discussed above.

#### MIXED BANKING

The mixed banking system is one in which the commercial banks advance both short-term and long- term loans to commerce and industry. Under the British banking system, the commercial banks give short- term loans to commerce and industry.

But in other European countries like Germany, the Netherlands, Hungary and Belgium, the mixed banking system operates whereby the commercial banks lend money to meet the short-term and long-term requirements of industry and commerce. Mixed banks perform the usual banking functions and also provide industrial finance.

## Merits of Mixed Banking:

The mixed banking system has some advantages which the British type "pure" banking system lacks. They are as follows:

# 1. Provide Initial Capital:

The mixed banks help the establishment of industries by providing them initial capital for long-term.

#### 2. Underwrite Shares and Debentures:

They undertake to underwrite the equity shares and debentures of industries and thus help them in mobilising public savings for capital formation.

# 3. Higher Profits:

The profits of the commercial banks increase when they themselves invest in the long- term securities of industries. For they earn high interest rates on them.

# 4. Help in Feasibility Reports:

The industries stand to gain when such banks render expert advice in preparing feasibility reports and in financial matters.

# 5. Help in Industrialisation:

The granting of long-term loans to industries by the mixed banks helps in the rapid industrial development of the economy.

#### 6. Advice to Customers:

Mixed banks help customers by giving valuable advice on investments in shares and debentures of industrial concerns.

#### **Demerits of Mixed Banking:**

The mixed banking system has the following disadvantages that is why it is not practiced in England, the USA and some of the other developed countries:

# 1. Against the Liquidity Principle:

It is against the banking principle of liquidity of bank assets. When the bank advances long-term loans to industries, its large funds are locked up which prevent the bank to meet the short-term requirements of trade and commerce.

## 2. Heavy Losses:

If there is depression in economy it is not possible for industries to repay the loans. This leads to failure of the banks if they have lent vast sums to industries. This actually happened during the Great Depression of 1930s. Even a recession in industries which have borrowed capital will adversely affect the mixed banks leading to heavy losses.

#### 3. Fear of Overinvestment:

During a boom mixed banks overinvest their funds in industries in order to earn more profits. They may also indulge in trade in securities and do speculation. Such operations may lead to huge losses if prices of securities fall suddenly.

Despite many advantages and few disadvantages of mixed banking, many banks failed in America, France, Germany and other European countries because they operated as mixed banks and industries failed to repay the loans.

# **Correspondent Banking**

Correspondent banking is again an important feature of USA banking system. The USA is geographically a very big country where there are thousands of banks which operate in restricted areas. The various types of banks are able to operate efficiently through a correspondent relationship with one-another.

The country banks have deposits with city banks and city banks have deposits in state banks in the same and other cities. The centre of correspondent banking is New York city, followed by Chicago and other regional centres in big American cities. Many banks have deposits to more than one centre and correspondent banks in one centre have correspondent relations with banks in other centres.

When a small bank maintains its deposits with a big correspondent bank having a network of branches, the latter provides such services to the former as extending large credit facilities, facilitating foreign exchange transactions, cheque clearing and collection, purchase and sale of securities, etc.

It also provides a wide range of other services to small banks which include reports on the state of the economy, advice on portfolio management, borrowing from FRS in small lots, sharing computer facilities, etc.

## **Merits of Correspondent Banking:**

This unique American banking system has certain advantages for the country (unit) banks, the city (branch) banks and for the economy.

# They are as follows:

## 1. Rapid Movement of Funds:

Under correspondent banking, cheques of country banks are cleared and collected without much delay. Thus there is a rapid movement of funds from one area to the other. This system facilitates trade and industry.

# 2. Help in Dealing in Securities:

Correspondent city banks help the country banks in the buying and selling of securities.

## 3. Help in Providing Finance:

Such banks also help the country banks in financing loans and advances by providing them funds.

## 4. Help in Transfer of Funds:

They also accept or draw drafts on the country banks and thus help in transferring funds.

## 5. Help in Foreign Exchange Transactions:

They facilitate foreign exchange transactions of their correspondent banks.

# 6. Increase in Mobility of Credit:

They increase the geographical mobility of credit when business is transacted from one area to the other through these banks.

#### 7. Render Technical Advice:

City banks also render technical advice to the country banks in installing new machines, providing legal advice, and in making investments in securities and advancing loans.

#### 8. Provide Information:

They also provide information about the general and economic conditions of the country to the unit banks regularly.

# 9. Gain in Deposits and Business:

The correspondent city banks themselves gain in deposits and new business by entering into correspondent relations with the country banks. On the basis of the deposits, the city banks are able to profit more.

#### 10. Increase in Balances:

Balances in correspondent banks tend to increase manifold which provide liquid assets with the result that they can be utilised as a ready source of funds for all banks engaged in corresponding relations. They can also be used as legal reserves with the Federal Reserve Banks and can be withdrawn in case of need.

## 11. Gains to the Economy:

The whole economy benefits from the correspondent banking system. There is no fear of monopoly banking. The general public can easily transfer funds from one part of the country to the other. People can use travellers' cheques issued even by a small unit bank throughout the country. Foreign exchange business can easily be transacted and investments in stocks, shares etc. can be made even from the remotest corner of the vast

American mainland through a tiny village bank. Thus the correspondent banking system facilitates ail types of transactions and helps trade and industry.

#### **Demerit:**

The only dement of this system is that the correspondent city banks may take excess advances on the basis of the deposits of their correspondent country banks. They may thus operate against the principles of safety and liquidity and harm not only the country banks but also the entire banking structure in the economy.

#### COMMERCIAL BANKS

## Meaning

The word 'bank' is used in the sense of a commercial bank. It is of Germanic origin though some persons trace its origin of the French word 'Banqui' and the Italian word 'Banca'. Chamber's Twentieth Century Dictionary defines a bank as an "institution of the keeping, lending and exchanging, etc. of money." Economists have also defined a bank highlighting its various functions. According to Crowther, "The banker's business is to take the debts of other people to offer his own in exchange, and thereby create money." A similar definition has been given by kent who defines a bank as "an organization whose principal operations are concerned with the accumulation of the temporarily idle money of the general public for the purpose of advancing to others for expenditure. Sayers, on the other hand, gives a still more detailed definition of a bank thus: "Ordinary banking business consists of changing cash for bank deposits and bank deposits for cash; transferring bank deposits from one person or corporation (one 'depositir') to another; giving bank deposits in exchange for bills of exchange, government bonds, the secured or unsecured promises of businessmen to repay, etc." thus a bank is an institution which accepts deposits from the public and in turn advances loans by creating credit. It is

different from other financial institutions in that they cannot create credit though they may be accepting deposits and making advances.

#### **Functions of Commercial Banks**

Commercial banks perform a variety of functions which can be divided as: (1) accepting deposits; (2) advancing loans; (3) Credit creation; (4) financing foreign trade; (5) agency services; and (6) miscellaneous services to customers. These functions are discussed as follows:

# 1. Accepting Deposits

This is the oldest function of a bank and the banker used to charge a commission for keeping the money in its custody when banking was developing as an institution. Nowadays a bank accepts three kinds of deposits from its customers. The first is the savings deposits on which the bank pays small interest to the deposits who are usually small savers. The depositors are allowed to draw their money by cheques up to a limited amount during a week or year. Deposits are also accepted by a bank in fixed or time deposits. Savers who to not need money for a stipulated period from 6 months to longer periods ranging up tp 10 years or more are encouraged to keep it in fixed deposit accounts. The bank pays a higher rate of interest on such deposits.

# 2. Advancing Loans

One primary functions of a commercial banks is to advance loans to its customers. A bank lends a certain percentage of the cash lying in deposits on a higher interest rate than pay on such deposits. This is how it earns profit and carries on its business. The bank advances loans in the following ways:

(a) Cash Credit. The bank advances loan to businessmen against certains specified securities. The amount of the loan is credited to the current account of the borrower. In cash of a new customer a loan account for the sum is opened. The borrower can withdraw

money through cheques according to his requirements buy pays interest on the full amount.

- (b) Call Loans. These are very short-term loans advanced to the bill broken for not more than fifteen days. They are advance against first class bill or securities. Such loans can be recalled at a very short notice. In normal times they can also be renewed.
- (c) Overdraft. A bank often permits a businessmen to draw cheques for a sum greater than the balance lying in his current account. This is done by providing the overdraft sanctioned to by him the banks.
- (d) Discounting Bills of Exchange. If a creditor holding a bill of exchange wants money immediately, the bank provides him the money by discounting the bill of exchange. It deposits the amount of the bill in the current account of the bill-holder after deducting its rate of interest for the loan which is not more than 90 days. When the bill of exchange matures, the bank gets its payment from the banker of the debater who accepted the bill.

## 3. Credit Creation

Credit creation is one of the most important functions of the commercial banks. Like other financial institutions, they aim at earning profits. For this purpose, they accept deposits and advance loans by keeping a small cash in reserve for day-to-day transaction. When a bank advances a loan, it opens and account in the name of the customer and does not pay him in cash allows him to draw the money by cheque according to his needs. By granting a loan, the bank creates credit or deposit.

# 4. Financing Foreign Trade

A commercial bank finance foreign trade of its customers by accepting foreign bills of exchange and collecting them from foreign banks. It also transacts other foreign exchange business and buys and sells foreign currency.

## 5. Agency Services

A bank acts as an agent of its customers in collecting and paying cheques, bills of exchange, drafts, dividends, etc. It also buys and sells shares, securities, debentures, etc. for its customers. Further, it pays subscribing, insurance premia, rent, electric and water bills, and other similar charges on behalf of its clients. It also acts as a trustee and executor of the property and will of its customers. Moreover, the bank acts as an income tax consultant to its clients. For some of these services, the bank charges a normal fee while it renders others free of charge.

#### 6. Miscellaneous Services

Besides the above noted services, the commercial bank performs a number of other services. It acts as the custodian of the valuables of its customers by providing them lockers where they can keep their jewellery and valuable documents. It issue various forms of credit instruments, such as cheques, drafts, travelers' cheques, etc. which facilities transactions. The bank also issues letter of credit and acts as a referee to its client.

## **Role of Commercial Banks in a Developing Country**

Besides performing the usual commercial banking functions, banks in developing countries play an effective role in their economic development. The majority of people in such countries are poor, unemployed and engaged in traditional agriculture. There is acute shortage of capital. People lack initiative and enterprise. Means of transport are undeveloped. Industry is depressed. The commercial banks help in overcoming these obstacles and promoting economic development. The role of a commercial bank in a developing country is discussed as under.

## 1. Mobilizing Saving for Capital Formation

The commercial banks help in mobilizing savings through network of branch banking. People in developing countries have low incomes but the banks induce them to save by introducing variety of deposit schemes to suit the needs of individual depositors. They also mobilize idle savings of the few rich. By mobilizing savings, the banks channelize them into productive investments. Thus they help in the capital formation of a developing country.

## 2. Financing Industry

The commercial banks finance the industrial sector in a ways. They provide short-term, medium and long-term loans to industry. In India they provide short-term loans.

# 3. Financing Trade

The commercial banks help in financing both internal and external trade. The banks provide loans to retailers and wholesalers to stock goods in which they deal. They also help in the movement of goods from one place to another by providing all types of facilities such as discounting and accepting bills of exchange, providing overdraft facilities, issuing drafts, etc...

## 4. Financing Agriculture

The commercial banks help the large agriculture—sector in developing countries in a number of ways. They provide loans to traders in agriculture commodities. They open a network of branches in rural areas to provide agriculture credit. They provide finance directly to agriculturists for the marketing of their produce, for the modernization and mechanization of their farms, for providing irrigation facilities, for developing land, etc. They also provide financial assistance for animal husbandry, dairy farming, sheep breeding, poultry farming and horticulture. The small and marginal farmers and landless agriculture workers, artisans and petty shopkeepers in rural areas are provide financial

assistance through the regional rural banks in India. Thus the commercial banks meet the credit requirements of all types of rural people.

# 5. Financing Consumer Activities

People in underdeveloped countries being poor and having low incomes do not possess sufficient financial resource to buy durable consumer goods. The commercial banks advance loans to consumers for the purchase of such items as houses, Scooters, fans, refrigerators, etc. In this way, they also help in raising the standard of living of the people in developing countries by providing loans consumptive activities.

# 6. Financing Employment Generating Activities

The commercial banks finance employment generating activities in developing countries. They provide loans for the education of young persons studying in engineering, medical and other vocational institutes of higher learning. They advance loans to young entrepreneurs, medical and engineering graduates, and other technically trained persons in establishing their own business. Such loan facilities are being provide by a number of commercial banks in India. Thus the banks not only help inhuman capital formation but also in increasing entrepreneurial activities in developing countries.

## 7. Help in Monetary Policy

The commercial banks help the economic development of a country by faithfully following the monetary policy of the central bank. In fact, the central bank depends upon the commercial banks for the success of its policy of monetary management in keeping with requirements of a developing economy.

Thus the commercial banks contribute much the growth of a developing economy by granting loans to agriculture, trade and industry, by helping in physical and human capital formation and by following the monetary policy of the country.

#### NATURE OF CENTRAL BANKING

The basic nature of Central Banking can be enumerated as follows:

- 1. The Central Bank does not aim at profits but aims at national welfare.
- 2. The Central Bank does not compete with the member banks.
- 3. The Central Bank has special relationship with government and with commercial banks.
- 4. The Central Bank is generally free from political influence.
- 5. The Central Bank is the apex body of the banking structure of the country.
- 6. The Central Bank should have overall control over the financial system.

## **Quantitative and Qualitative Measures of Credit Control**

Credit control is most important function of Reserve Bank of India. Credit control in the economy is required for the smooth functioning of the economy. By using credit control methods RBI tries to maintain monetary stability. There are two types of methods:

- 1. Quantitative control to regulates the volume of total credit.
- 2. Qualitative Control to regulates the flow of credit

Here is a brief description of the quantitative and qualitative measures of credit control used by RBI.

# **Quantitative Measures**

The **quantitative measures** of credit control are as follows:

Bank Rate Policy

The bank rate is the Official interest rate at which RBI rediscounts the approved bills held by commercial banks. For controlling the credit, inflation and money supply, RBI will increase the Bank Rate.

**Open Market Operations** 

Open Market Operations refer to direct sales and purchase of securities and bills in the open market by Reserve bank of India. The aim is to control volume of credit.

Cash Reserve Ratio

Cash reserve ratio refers to that portion of total deposits in commercial Bank which it has to keep with RBI as cash reserves.

**Statutory Liquidity Ratio** 

SLR refers to that portion of deposits with the banks which it has to keep with itself as liquid assets(Gold, approved govt. securities etc.) If RBI wishes to control credit and discourage credit it would increase CRR & SLR.

# **Qualitative Measures**

Qualitative measures are used by the RBI for selective purposes. Some of them are

# Margin requirements

This refers to difference between the securities offered and amount borrowed by the banks.

## **Consumer Credit Regulation**

This refers to issuing rules regarding down payments and maximum maturities of instalment credit for purchase of goods.

#### **RBI Guidelines**

RBI issues oral, written statements, appeals, guidelines, warnings etc. to the banks.

#### **Rationing of credit**

The RBI controls the Credit granted / allocated by commercial banks.

# **Moral Suasion**

Psychological means and informal means of selective credit control.

#### **Direct Action**

This step is taken by the RBI against banks that don't fulfil conditions and requirements.

RBI may refuse to rediscount their papers or may give excess credits or charge a penal rate of interest over and above the Bank rate, for credit demanded beyond a limit.

Under Selective Credit Control, credit is provided to selected borrowers for selected purpose, depending upon the use to which the control tries to regulate the quality of credit - the direction towards the credit flows. The Selective Controls are

# 1. Ceiling on Credit

The Ceiling on level of credit restricts the lending capacity of a bank to grant advances against certain controlled securities.

# 2. Margin Requirements

A loan is sanctioned against Collateral Security. Margin means that proportion of the value of security against which loan is not given. Margin against a particular security is reduced or increased in order to encourage or to discourage the flow of credit to a particular sector. It varies from 20% to 80%. For agricultural commodities it is as high as 75%. Higher the margin lesser will be the loan sanctioned.

#### 3. Discriminatory Interest Rate (DIR)

Through DIR, RBI makes credit flow to certain priority or weaker sectors by charging concessional rates of interest. RBI issues supplementary instructions regarding granting of additional credit against sensitive commodities, issue of guarantees, making advances etc.

#### 4. Directives

The RBI issues directives to banks regarding advances. Directives are regarding the purpose for which loans may or may not be given.

## 5. Direct Action

It is too severe and is therefore rarely followed. It may involve refusal by RBI to rediscount bills or cancellation of license, if the bank has failed to comply with the directives of RBI.

#### 6. Moral Suasion

Under Moral Suasion, RBI issues periodical letters to bank to exercise control over credit in general or advances against particular commodities. Periodic discussions are held with authorities of commercial banks in this respect.

# **Differences between Quantitative and Qualitative Credit Controls**

A pertinent question that can be conveniently raised is: are quantitative credit controls more important or qualitative?

In theory as well as in practice, there is much to be said in favour of qualitative controls and against an indiscriminate use of quantitative methods. On the other hand, qualitative controls cannot alone cure an inflationary situation.

Quantitative controls aim at regulating the overall volume of bank credit, rather the particular made use of it. 'Selective' or 'Qualitative' controls may have an important direct impact on particular sectors of the economy. But their effectiveness is limited. A special control may restrain direct bank loans to finance stock market speculation, but it cannot prevent the use of other bank credit for this purpose.

Another big weakness of selective controls is that they directly restrict individual choice among alternatives. Special controls on housing credit, for example, mean that the government diverts consumers away from buying houses to other ways of spending money. General controls, by contrast, limit the total amount of money but they don't try to influence what kind of spending the borrower does.

However, selective credit controls have own merits. For example, during inflation, quantitative controls are likely to pull the economy down to depression, if applied too severely. They are jerky in their operation. Fear of a shortage approach leads many observers to prefer selective or qualitative restraints to check inflationary loans. They argue that the problem is usually centered in some particular sector of the economy, and that to use general restraint is to risk killing off the whole boom in order to get at the offending sector.

The boom may be caused by excessive consumer spending on durables, or excessive credit-financed housing or rampant stock market speculation. All these factors may be running the boom so fast as to endanger the whole prosperity. But soft spots remain in other parts of the economy. In these circumstances, the right policy will be to adopt real estate credit control, controls on down payment sales of consumer durables and fixing margin requirements for stock market speculative credit.

If we restrict ourselves to quantitative methods, with the speculative mood in real estate and a spending spree on other consumer durables, it might take very high interest rates to damp real estate and other demands, and these would risk killing off the entire boom. Direct restrictions on these special sectors can nip the over-expansion there with little danger to the rest of the economy.

But as, we noted above, selective controls have their own weaknesses. Uneven enforcement is the greatest danger of such special controls. Selective credit controls are not a real substitute for general credit restraint, when in an economy-wide inflationary boom is the problem. However, they can play a useful, though modest, role for restraining particular kinds of credit extension. They are a good supplement to the quantitative controls.

## What is the Importance of Qualitative Methods of Credit Control?

The qualitative or selective methods of credit control are adopted by the Reserve Bank in its pursuit of economic stabilization and as part of credit management.

## 1. Margin Requirements:

Changes in margin requirements are designed to influence the flow of credit against specific commodities. The commercial banks generally advance loans to their customers against some security or securities offered by the borrowers and acceptable to banks.

More generally, the commercial banks do not lend upto the full amount of the security but lend an amount less than its value.

The margin requirements against specific securities are determined by the Reserve Bank. A change in margin requirements will influence the flow of credit. A rise in the margin requirements results in a contraction in the borrowing value of the security and similarly, a fall in the margin requirements results in expansion in the borrowing value of the security.

## 2. Credit Rationing:

Rationing of credit is a method by which the Reserve Bank seeks to limit the maximum amount of loans and advances, and also in certain cases fix ceiling for specific categories of loans and advances.

#### 3. Regulation of Consumer Credit:

Regulation of consumer credit is designed to check the flow of credit for consumer durable goods. This can be done by regulating the total volume of credit that may be extended for purchasing a specific durable goods and regulating the number of instalments through which such loan can be spread. Reserve Bank uses this method to restrict or liberalise loan conditions accordingly to stabilise the economy.

#### 4. Moral Suasion:

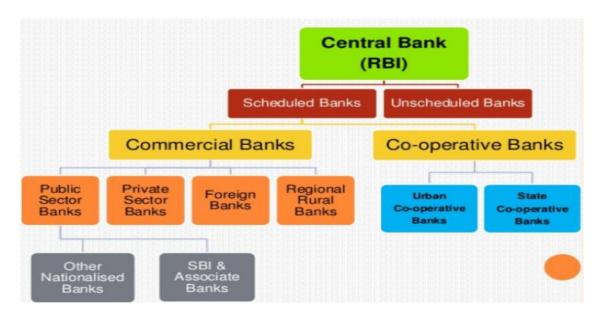
Moral suasion and credit monitoring arrangement are other methods of credit control. The policy of moral suasion will succeed only if the Reserve Bank is strong enough to influence the commercial banks.

In India, from 1949 onwards the Reserve Bank has been successful in using the method of moral suasion to bring the commercial banks to fall in line with its policies regarding credit. Publicity is another method whereby the Reserve Bank makes direct appeal to the public and publishes data which will have sobering effect on other banks and the commercial circles.

## Roles & Functions of Reserve Bank of India – Introduction

India is one of the fastest growing economies in the world, with a population over 1.2 Billion, has become the hub for global investment. There are various factors that influence and control Indian economy, one such being, The RBI, one of the oldest institution behind the success of our economy.

The RBI is the backbone of Indian economy and because of it, growth in Exports, FOREX, Capital Markets and other sectors of the economy are all happening. It plays an important role in strengthening, developing and diversifying the country's economic and financial structure. It is the apex bank in the Indian Banking System.



The Reserve Bank of India (RBI) is **India's Central banking institution**, which controls the monetary policy of the Indian rupee. The Reserve Bank of India was established on April 1, 1935, in accordance with the provisions of the Reserve Bank of India Act, 1934. Though originally privately owned, since nationalisation in 1949, the Reserve Bank is fully owned by the Government of India.

# Functions of Reserve Bank of India in Indian Banking System

- Monetary Authority: It controls the supply of money in the economy to stabilize
  exchange rate, maintain healthy balance of payment, attain financial stability,
  control inflation, strengthen banking system
- 2. **The issuer of currency**: The objective is to maintain the currency and credit system of the country to maintain the reserves. It has the sole authority in India to issue currency. It also takes action to control the circulation of fake currency.
- 3. **The issuer of Banking License**: As per Sec 22 of Banking Regulation Act, every bank has to obtain a Banking license from RBI to conduct banking business in India.
- 4. **Banker's to the Government**: It acts as banker both to the central and the state governments. It provides short-term credit. It manages all new issues of government loans, servicing the government debt outstanding and nurturing the market for government's securities. It advises the government on banking and financial subjects.
- 5. **Banker's Bank**: RBI is the bank of all banks in India as it provides the loan to banks/bankers, accept the deposit of banks, and rediscount the bills of banks.
- 6. **Lender of last resort**: The banks can borrow from the RBI by keeping eligible securities as collateral at the time of need or crisis.

- 7. **Banker and debt manager of government**: RBI keeps deposits of Governments free of interest, receives and makes payment, carry exchange remittances, and help to float new loans and manage public debt, act as an advisor to Government.
- 8. **Money supply and Controller of Credit**: To control demand and supply of money in Economy by Open Market Operations, Credit Ceiling, etc. RBI has to meet the credit requirements of the rest of the banking system. It needs to maintain price stability and a high rate of economic growth.
- Act as clearinghouse: For settlement of banking transactions, RBI manages 14
  clearing houses. It facilitates the exchange of instruments and processing of
  payment instructions.
- 10. Manager of foreign exchange: It acts as a custodian of FOREX. It administers and enforces the provision of Foreign Exchange Management Act (FEMA), 1999.
  RBI buys and sells foreign currency to maintain the exchange rate of Indian rupee v/s foreign currencies.
- 11. **Regulator of Economy**: It controls the money supply in the system, monitors different key indicators like GDP, Inflation, etc.
- 12. **Managing Government securities**: RBI administers investments in institutions when they invest specified minimum proportions of their total assets/liabilities in government securities.
- 13. **Regulator and Supervisor of Payment and Settlement systems**: The Payment and Settlement systems Act of 2007 (PSS Act) gives RBI oversight authority for the payment and settlement systems in the country. RBI focuses on the development and functioning of safe, secure and efficient payment and settlement mechanisms.

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

## **Role of RBI in Economic Development**

- 1. Development of banking system
- 2. Development of financial institutions

- 3. Development of backward areas
- 4. Economic stability
- 5. Economic growth
- 6. Proper interest rate structure

#### **Promotional Role of RBI**

- 1. Promotion of commercial banking
- 2. Promotion of cooperative banking
- 3. Promotion of industrial finance
- 4. Promotion of export finance
- 5. Promotion of credit to weaker sections
- 6. Promotion of credit guarantees
- 7. Promotion of differential rate of interest scheme
- 8. Promotion of credit to priority sections including rural & agricultural sector

## Supervisory Functions of Reserve Bank of India

- 1. Granting license to banks & controlling the opening of new branches
- 2. Bank Inspection
- 3. Control over Non-Bank Financial Institutions: The Non- Bank Financial Institutions are not influenced by the working of a monitory policy. RBI has a right to issue directives to the NBFIs from time to time regarding their functioning.
- 4. Implementation of the Deposit Insurance Scheme: In order to protect the deposits of small depositors, RBI work to implement the Deposit Insurance Scheme in case of a bank failure. (For bank deposits below 1 Lakh.)

# **Prohibitory Functions of Reserve Bank of India**

1. It cannot provide any direct financial assistance to any industry, trade or business

- 2. It cannot purchase its own share
- 3. It cannot purchase shares of any commercial and industrial undertaking
- 4. It cannot purchase any immovable property
- 5. It cannot give loans on the security of shares and property

#### Functions of Reserve Bank of India – General Terms

- Monetary policy refers to the use of certain regulatory tools under the control of the RBI in order to regulate the availability, cost and use of money and credit.
- Cash Reserve Ratio (CRR): Banks are required to hold a certain proportion of
  their deposits in the form of cash with RBI. RBI uses CRR either to drain excess
  liquidity from the economy or to release additional funds needed for the growth of
  the economy.
- Statutory Liquidity Ratio (SLR): SLR is the amount that commercial banks are
  required to maintain in the form of gold or government approved securities before
  providing credit to the customers.
- Repo Rate: The rate at which the RBI is willing to lend to commercial banks is called Repo Rate. Whenever banks have any shortage of funds they can borrow from the RBI, against securities. If the RBI increases the Repo Rate, it makes borrowing expensive for banks and vice versa. As a tool to control inflation, RBI increases the Repo Rate, making it more expensive for the banks to borrow from the RBI with a view to restricting the availability of money. Similarly, the RBI will do the exact opposite in a deflationary environment.
- Reverse Repo Rate: The rate at which the RBI is willing to borrow from the commercial banks is called reverse repo rate. If the RBI increases the reverse repo rate, it means that the RBI is willing to offer lucrative interest rate to banks to park their money with the RBI. This results in a decrease in the amount of money

available for banks customers as banks prefer to park their money with the RBI as it involves higher safety. This naturally leads to a higher rate of interest which the banks will demand from their customers for lending money to them.

The Repo Rate and the Reverse Repo Rate are important tools with which the RBI can control the availability and the supply of money in the economy.

**Fiscal Policy**: It is related to direct taxes and government spending. When direct taxes increased and government spending increased than the disposable Income of the people reduces and hence the demand reduces.

- On the basis of an assessment of the current and evolving macroeconomic situation at its meeting today, the Monetary Policy Committee (MPC) decided to keep the policy repo rate under the liquidity adjustment facility (LAF) unchanged at 6.0 percent.
- Consequently, the reverse repo rate under the LAF remains at 5.75 percent, and the marginal standing facility (MSF) rate and the Bank Rate at 6.25 percent.
- The decision of the MPC is consistent with a neutral stance of monetary policy in consonance with the objective of achieving the medium-term target for consumer price index (CPI) inflation of 4 percent within a band of +/- 2 percent while supporting growth.

Policy Repo Rate	6.00%
Reverse Repo Rate	5.75%
Marginal Standing	6.25%
Facility Rate	
Bank Rate	6.25%
CRR	4%
SLR	19.5%
Base Rate	8.95% – 9.45%
MCLR	7.70% - 8.05%
Savings Deposit Rate	3.50% - 4.00%
Term Deposit	6.00% - 6.75%
Rates > 1 year	

# References

Jhingan, M. L; (2012). Monetary Economics, (Delhi: Vrinda Publications (P) Ltd)

Growther, G; An Outline of Money

Vaish, M. V; Monetary Economics

Seth, M. L; Monetary Economics

Mithani, D. M; Money, Banking, International Trade and Public Finance

Sundaram, K.P.M; Money, Banking, Trade and Finance

Compiled:

Dr. G. MONIKANDA PRASAD

Assistant Professor of Economics M. S. University, Tirunelveli.