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Lesson No.

- 1.1 Interest : Liquidity Preference Theory
- 1.2 Money: Evolution, Types, Significance, Functions and Role
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LESSON NO. 1.1

INTEREST : Liquidity Preference Theory**Introduction**

Whereas land and labour are called the primary factors of production, capital is regarded as an intermediate factor due to the fact that it is produced in the economic system itself. The fundamental difference between land and labour on the one hand, capital on the other is that the latter is made by man and, on this account, it is also called a **produced factor** of production. Since the term capital in economics denotes all those man-made instruments of production (e.g., machines and factories) that are used to carry on production of other goods, this factor plays a unique role in modern or round-about productive devices. No country, however, rich it may be in natural and human resources can make any sizeable progress on the economic front without adequate supplies of capital. Within a country also, firms are in constant need of capital because land and labour will produce much more with the help of tools and machines than they will otherwise do. The services rendered by capital, therefore, enable us to obtain either the same output with lesser efforts or more output with the same efforts. Now the question is : should capital be rewarded for these services ? The answer is, yes of course. If it is to the advantage of an entrepreneur to use capital, he will be willing to pay a price for it as he does in the case of other factors of production. This price goes by the name of interest in economics and it is always expressed in terms of percentage. Borrowers of funds usually enter into a contract to make these payments and the interest, thus, settled is called **explicit interest**. But when a man uses his own funds to buy a machine, this involves a cost because, if he had lent that amount to some one else, he would have earned some interest. Interest on one's own funds, thus, foregone is called **imputed interest** for this is imputed price that one incurs to buy the capital goods.

1. Gross and Net (or pure) Interest

The term gross interest stands for the total payment that a borrower makes to the lender. But this payment does not cover reward for the services of capital alone. In addition to this, it includes compensation for taking risks and for keeping accounts of these loans which cause a lot of inconvenience to the lender. When these payments are subtracted from the gross interest, we get net or pure interest which alone constitutes payment for the services of capital. The theories of interest put forward from time to time deal with net rate of interest.

Difference in Rates of Interest

The difference in the rates of interest that we usually come across can be attributed, in addition to factors mentioned above, to differences in period and amount of loan, difference in the nature of securities offered, difference in the nature of the money markets and last but not the least to difference in productivity of capital

in different uses. But in the ultimate analysis, most of these factors have a bearing either on the risk or inconvenience of the component of the gross interest. Pure interest will tend to be the same in the market. But what makes this rate, what it is at a particular time? Unfortunately, there is no agreement on the answer to this question and we will examine the important answers put forward by various economists.

2. Theories of Interest

Many economists have tried to explain how the rate of interest is determined. Broadly speaking, these attempts can be divided into two groups : (a) real theories, (b) monetary theories. The real theories, as the name indicate, relate the rate of interest to real factors like 'waiting', 'abstinence' and 'productivity' of capital. The monetary theories, on the other hand, emphasize the role of money as distinct from that of capital. The components of each group are examined below :-

(A) Real Theories of Interest

(a) **The Productivity Theory** : This theory states that interest is paid on account of productivity of capital. We have already noted how capital helps in the round about methods of production and usually the more round about the method of production, the larger is the volume of output because labour assisted by capital always produces more than it can produce when working by itself.

As more and more units of capital are employed, the output increases but at a diminishing rate. An entrepreneur will, therefore, stop at that point where the price (i.e., interest) that he has to pay for each unit of capital is just equal to its marginal product.

Criticism

(i) This theory is considered to be one sided because it explains only why capital is demanded. So long as interest is a price, demand alone cannot determine its level in the absence of supply factor (ii) This theory ignores the fact that capital as such is not productive. It is rather the use to which it is put which decides whether or not it will be productive e.g., loans acquired for consumption purpose are not productive, but interest has to be paid on them. In spite of these weaknesses, we can say, that productivity does play a role in the determination of the rate of interest.

(b) Abstinence Theory

According to this theory, interest is the reward for abstinence i.e., abstaining from immediate consumption of wealth. In other words, income recipients, may spend the whole of their income on consumption, but when they decide to save they do it at the cost of present consumption. This obviously involves some sacrifice and some inducement for this is essential. Nassau Senior was the first economist to emphasize the point.

Now saving constitutes the supply of capital hence this theory approaches the problem of interest from the side of supply in contrast to the previous theory which approached it from the side of demand. In spite of this novelty, however, this theory is criticised as follows :-

Criticism

Karl Marx laid a frontal attack on the term 'abstinence' and ridiculed the idea that richer section of the community who supply most of the saving have to undergo a sacrifice. The gap between income and consumption of these people is so large that savings are almost automatically there and here the question of sacrifice does not arise.

Marshall came to the rescue of theory by substituting the word 'waiting' for 'abstinence'. It was pointed out that though saving may not entail a sacrifice yet they do mean postponement of consumption for a certain period. The saver will have to wait till the borrower return the loan and some compensation for this waiting is desirable. But just as savings done by the richer section involve no sacrifice, similarly they do not involve any postponement of present consumption i.e., in their case waiting is more or less automatic. So this version of the abstinence theory also suffers from the same shortcomings as were pointed out earlier.

(c) The Time Preference or the Agio Theory

The theory was developed by Bohm Bawerk and its emphasis is on the idea that present wants are urgent than future wants and hence we prefer a certain set of goods in the present to the same set at some future date. Bohm Bawerk advanced three reasons for this and they are : (i) The prospective underestimate of the future i.e., since future is uncertain we do not consider future needs very urgent : (ii) Since present wants are more important, demand for present goods is relatively greater than that for future goods. (iii) The present goods possess a technical superiority over the future goods, because as time passes, the use of round-about methods of production increase the final output. We, thus, say that our mental make up is such as makes future satisfaction appear smaller i.e., the future undergoes a discount when viewed from the present and the interest is paid to equate future satisfaction to present gratification. Due to the nature of the factors on which this theory is based it is also known as the Psychological Theory of Interest.

Fisher, an American economist, accepted the first two propositions advanced by Bohm Bawerk and pointed out that "Time preference" is the central idea in the theory of interest and this means the preference of goods in the present over the same good at some future date. It may be measured by the quantity by which a given amount of money must be increased to make it as attractive at a future time as it is in the present. For example, if a person is indifferent as to whether he has Rs. 100 today or Rs. 105 a year, hence his time-preference rate is 5 percent. This rate will depend upon the size of an individual's income, distribution of income over time, certainty of enjoying income in future and individual's character. Determined by these factors, an individual's rate of time-preference will have a tendency to coincide with the rate of interest. When it is higher than the rate of interest, the individual will borrow and use the amount, thus, secured for satisfying his urgent requirements. In case his rate of time-preference is below the rate of interest, he will lend. This will continue until his rate of time preference is equal to the rate of interest.

Criticism

(i) In either of the two forms this theory is one-sided for it explains only why capital has a supply price. Interest being a sort of price, cannot be determined by supply alone and this theory simply ignores the demand side. (ii) This theory is based on subjective factors, the objective measure of which is rather difficult.

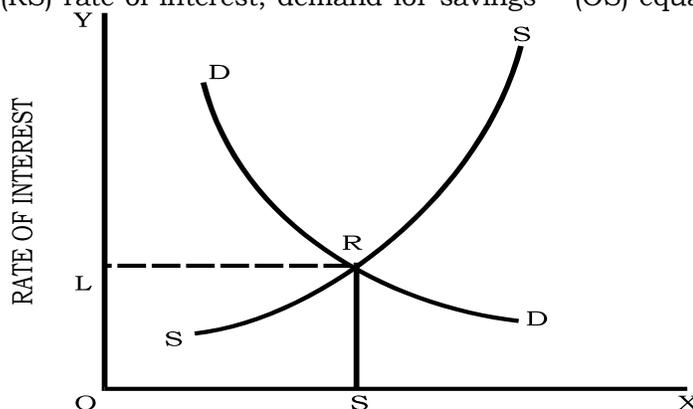
(d) The Demand and Supply Theory

In this approach an attempt is made to bring together some of the factors explained in the previous theories in order to develop a two-sided theory of interest. Since interest is the price paid for the use of capital, it can be determined neither by demand for capital, nor by supply of capital alone. We must, therefore, look to both demand and supply in order to understand the determination of the rate of interest. In the ultimate analysis, as we already know, demand for capital turns out to be demand for saving for the purpose of investment and the supply of capital is synonymous with the supply of saving (or simply savings done by the community).

The demand of capital comes from producers (i.e., investors) who need funds to purchase capital goods. But due to the law of diminishing returns, the marginal productivity of capital falls as the quantity of capital goods used increases.

The supply for capital available at any time depends upon the volume of savings done by a community. Broadly speaking, we can say that, if rate of interest goes up, the supply of savings will increase but this is a controversial point so long as the case of an individual saver is concerned because there are people who will save less at a higher rate of interest. But for the community as a whole the temptation offered by a higher rate of interest will produce a favourable influence on saving and hence the supply curve of capital will be sloping upward.

Now at some rate of interest the supply of savings and demand for saving is equated. This is the equilibrium rate of interest and like equilibrium price, it is determined by the intersection of demand for and supply of savings as indicated in Figure I. At $OL = (RS)$ rate of interest, demand for savings = (OS) equals the supply of



Demand and Supply of Savings

Figure-I

savings=(OS).

If at the current rate of interest people attempt to save more than investors's demand at that rate, the rate of interest will fall. On the other hand, if investors demand more funds at the current rate of interest than people are willing to save, the rate of interest tends to rise. Thus, the rate of interest on loans, i.e., the price paid for the services of capital is governed by demand and supply factors and some rate of interest equates the two.

Criticism

In spite of the fact that this theory takes into consideration both demand and supply factors, it has been criticised on the following grounds :-

(i) This theory looks upon the rate of interest as a mechanism that brings equality between saving and investments. But Keynes has asserted that this equality is brought about by changes in level of income.

(ii) This approach to the rate of interest assumes that the two curves, DD and SS, are independent of each other, i.e., if one of them shifts, the other may not. For example, if the DD curve in Figure 2 shifts due to increased demand for savings on the part of investors, the new curve (D'D') cuts the old SS curve at point M as the rate of interest will change from RP to LM. Keynes has, however, pointed out that the shift in DD curve will not leave positions of SS curve unchanged due to the reason that when investment increases, the level of income of the community will also change and, out of this increased income, people will be able to save more. Thus, the SS curve may so shift (to S'S') that the rate of interest in fact remains unchanged. This is shown in Fig 2 because the new rate of interest (NK) is equal to the old rate (RP).

(B) Monetary Theories

We now come to the monetary theories of interest. There are mainly two theories

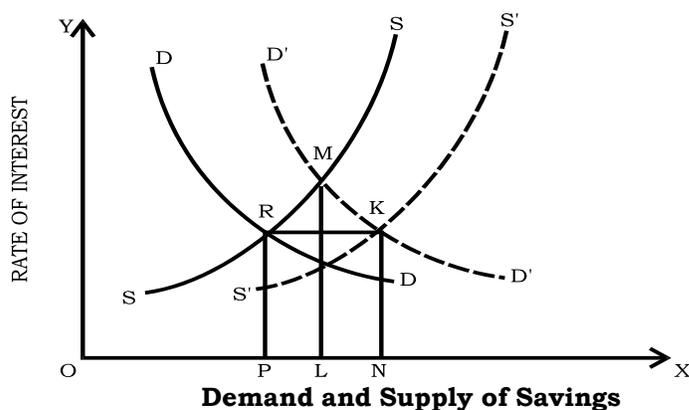


Figure-2

in this group which deserve our attention. The first is Keynes' Liquidity Preference Theory and the second is Loanable Funds Theory.

(a) Liquidity Preference Theory

This theory was developed by J.M. Keynes and he was the view that interest is a monetary phenomenon. Interest is the payment for the use of money and it is determined by the demand for the supply of money.

The demand for money is to hold money. Since money is the most liquid form of all assets, people desire to hold it either in the form of cash or in the form of readily withdrawable deposits so that whenever the necessity arises they can either spend it to make purchase or convert it into any other asset. Keynes uses the term "Liquidity Preference" for this desire. The three reasons or motives for liquidity preference mentioned by Keynes are examined below:

(i) The Transaction Motive : We know that money serves as a medium of exchange. The communities, therefore, hold some money to help normal transactions. A family or a business firm's receipts of income and its outlay or expenditure hardly ever synchronise. Normally, there is an interval between them and cash balances help to bridge it. The amount of money held by the community for the purpose depends on the level of income and employment and the manner of receipt of income. The demand for money arising from transactions is, therefore, income elastic.

(ii) The Precautionary Motive: Individuals and firms do not hold cash merely to bridge the gap between receipt of income and its expenditure as observed in the previous case, but also to take proper precautions against unforeseen contingencies like sickness, unemployment and accidents and, so far as firms are concerned, to safe-guard against future uncertainties. So long as individuals and firms have an easy access to ready cash, the precautionary motive to hold money will be relatively weak. Since future is quite uncertain it is not easy to decide as to how much money the community will hold for this purpose but, broadly speaking, it will depend upon the degree of prevailing uncertainty (e.g., more money will be held during a depression than during a boom), access to and availability of credit and facilities for quick conversion of liquid assets into cash. The amount held for this purpose is also income elastic and Keynes, thus, grouped these two motives together and concluded that the amount of money required for these motives is more or less inelastic to small changes in the rate of interest.

(iii) Speculative Motive: But we know that money is also a store of value and Keynes, therefore, laid a great emphasis on speculative demand for money because he felt people keep cash to take advantage of the rise and fall in the prices of bonds and securities. The cash held under this motive is used to make speculative gains associated with changes in the rate of interest. When an individual (or even a firm) expects the rate of interest to be higher in future and (hence) the price of securities to be lower than what the predominant opinion on the market expects them to be, he

may consider it more profitable to hold cash than a bond or security. In the opposite situation, he may decide to part with cash in favour of security because that will not only bring him the income yielded by the security, but also a capital gain consequent from a fall in the rate of interest in future. The amount of money held for this purpose is very sensitive to change in the rate of interest. The higher the rate of interest, the less will be the amount of money held for this purpose and vice-versa.

All the three motives determine the total demand for money. Since the demand for the first two motives is almost interest inelastic, we can construct a curve to indicate how much cash people would like to hold at different rates of interest,

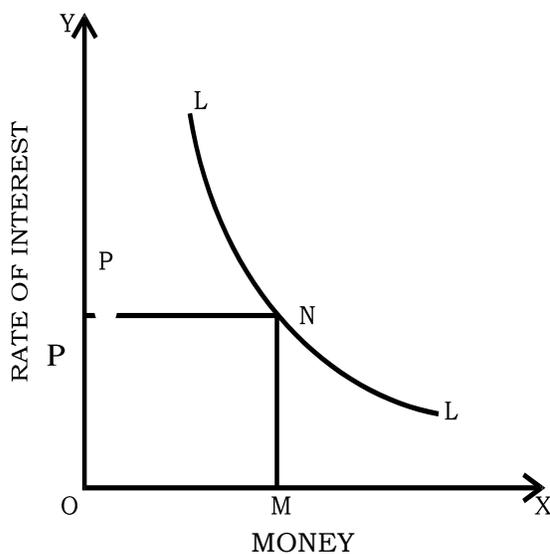


FIG. 3

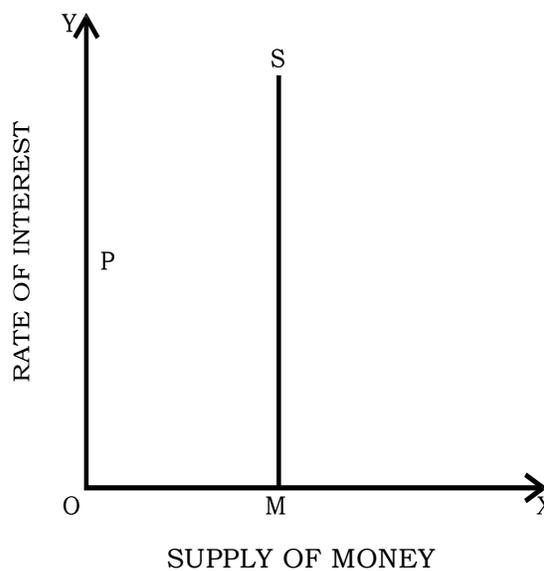


FIG. 4

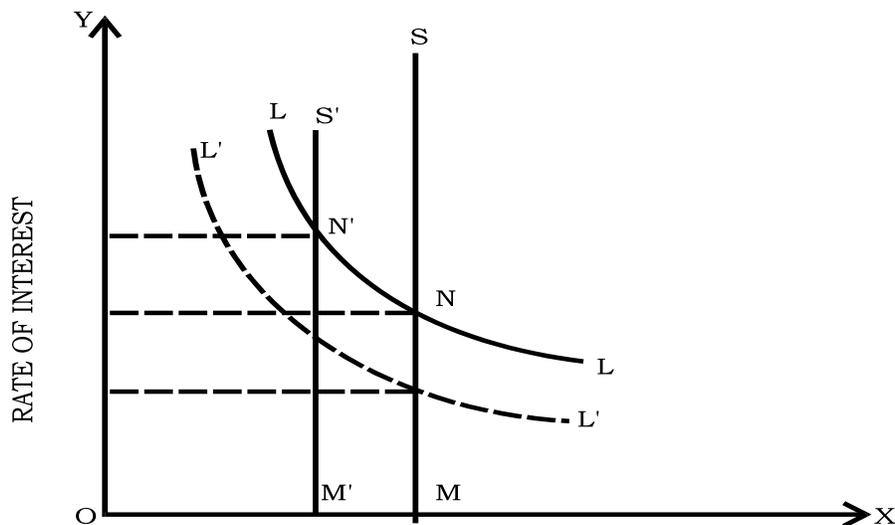
as emphasized in the case of third motive. In figure 3, LL curve indicates liquidity preference of the community. At $OP (=MN)$ rate of interest, OM amount of money will be held.

Supply of money is the other factor which influences the determination of the rate of interest. The supply of money depends on the banking system. At any particular time, this supply can be regarded as fixed and it can, thus, be represented by a vertical straight line MS as shown in Figure 4.

Equilibrium between Demand for and Supply of Money

When the liquidity preference curve of Fig.3 is made to cut the supply of money line of Fig.4, the equilibrium point N between demand for and supply of money is determined as shown in Fig. 5, At MN rate of interest the amount of money demanded for the three motives is equal to OM which is also supply of money made available

by the banking system.



SUPPLY OF MONEY
FIGURE 5

Rate of interest will undergo a change when either of the two determinants change. If supply of money remains the same but LL curve shifts to L'L' position, rate of interest declines to MN. Similarly, if the liquidity, preference curve does not shift but the supply of money decreases to OM' the rate of interest rises to M' N'

Criticism

This theory of interest is very popular and its use can explain many problems in economic analysis. Still this theory suffers from the following weaknesses:

(i) It has been pointed out that this theory cannot explain the co-existence of different rates of interest because, due to perfect uniformity of cash balances, the rate of interest will have to be uniform.

(ii) Keynes makes rate of interest independent of the demand for investment funds. Critics are of the opinion that this demand plays an important role in the determination of the rate of interest.

(iii) Keynes has placed undue emphasis on liquidity preference. It has been pointed out that an individual having spare funds has four choices : to invest in securities ; to hold cash ; to invest in production and to spend on consumption. In the case of firms, however, the last alternative is ruled out. The rate of interest theory which ignores but one of the influences cannot be considered satisfactory.

(iv) This theory does not hold good in depression. Keynes says that higher the liquidity preference., higher will be the rate of interest. But in the depression of 1929-33 this position was otherwise.

(b) The Loanable Funds Theory

The theory is an extension of the Demand and Supply Theory discussed as the last component of the real theories. That theory laid emphasis on the real factor being savings, whereas this theory (also known as the neo-classical theory) looks at the monetary aspect of savings. But whereas that theory concentrates only on demand for and supply of savings, this theory takes into consideration demand for funds coming not from investors but also from other borrowers. Now we are to see from which sources demand for and supply of loanable funds come:

Supply of Loanable Funds

(i) **Savings** : Savings are the difference between income and consumption. $y=c+s$ or $s=y-c$. This saving comes not only from individuals, but from business concerns also.

Given the level of income higher the rate of interest, higher will be the savings and vice-versa.

(ii) **Dishoarding** : Dishoarding means bringing out hoarded money into use. People hoard money to satisfy their desire for liquidity. At a low rate of interest there is not much encouragement to lend. But as the rate of interest goes up, people would like to dishoard their money rather than consuming it themselves.

(iii) **Disinvestment** : Disinvestment means not keeping sufficient amount for depreciation of machines. It is generally so, when the entrepreneurs do not like to keep funds for the replacement of the existing machines when they wear out and they lend those funds to earn more income in the form of rate of interest. But when rate of interest is high this type of investment is low.

(iv) **Bank Money** : Bank creates credit by lending their money to the investors. By giving loans they increase the supply of loanable funds. Banks lend more when rate of interest is high and less when it is low.

The total supply of loanable funds (obtained by adding all the sources)
 $=S+DH+DI+BM$ where

S =Savings, DH =Dishoarding, DI =Disinvestment and BM =Bank Money. This slopes upwards showing that the higher the rate of interest, the greater will be the supply of loanable funds.

Demand for loanable funds

Demand for loanable funds also comes from many sides:

(i) **Investment** : Rate of interest is the cost of borrowing funds for investment. So long as this rate of interest is less than the marginal productivity of capital, the entrepreneurs will go on demanding funds for further investment. The moment both become equal, investment is stopped. In other words, demand for loanable funds for investment rises with the fall in the rate of interest.

(ii) **Dis-saving** : Dis-saving means consuming more than the income in the current period. It is excess of expenditure or consumption over income and is, thus, negative saving. It is generally so when people like to purchase such durable goods

like scooter, fridge etc. It is when rate of interest is low.

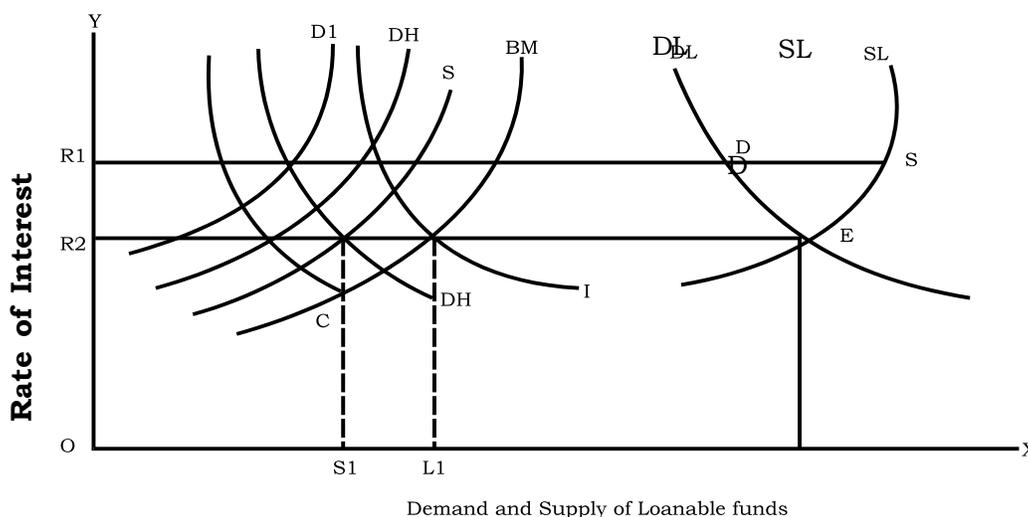
(iii) Hoarding : People like to hold money as idle cash balances when they feel that rate of interest is not so high as to induce them to part with it. Thus, the inducement to hoard is greater at lower rate of interest, and less at higher rates.

Total Demand for loanable funds = $I + DS + H$, where

I =Investment, DS = Dis Saving and H =Hoarding

Determination of Rate of Interest

Rate of interest will be determined at the point where demand for and supply of loanable funds are equal. In the diagram that point is E , and the rate of interest is OR . But at this rate of interest saving and investment are not equal i.e $saving = OS_1$ and $investment = OL_1$. So, rate of interest thus rises to make them equal, At, OR_1 rate of interest, this equality is there but here demand for loanable funds is R^1, D and supply of loanable funds is R^1S .



Demand and Supply of Loanable Funds

So equilibrium rate of interest will vary in between the points R and R^1 and there is some point where rate of interest will be determined. But that point cannot be shown in the diagram.

Criticism

The supporters of the loanable fund claim that this theory is superior to the liquidity preference theory because it corresponds more closely to the way in which the business world thinks of the determination of rate of interest. It is, however, criticised on the following grounds :-

- (i) Critics point out that this theory involves too much of supply and demand frame-work, i.e., too many variables that cannot be handled conveniently.
- (ii) Another charge levelled against this theory is that the various

components on the demand and supply side are not independent of each other.

3. Interest Rates and Allocation Mechanism

(a) Capitalist Economy : Interest like any other price performs an important service in helping to allocate economic resources between various sectors of an economy. It helps us in deciding as to how much will be spent on capital goods. It further restricts the production of capital goods only to those type which may yield more return within a short period of time. When interest rates are low, money can be invested even in those capital goods that will increase productivity only slightly and this will not happen during the period of high interest rates.

(b) Socialist Economy: The role of interest rates will be the same as outlined above even if it were determined by the central authority provided, however, this authority also controlled the supply of funds in such a way as will equate the supply of demand for funds at the rate of interest. Though the criterion of the highest return in future in the socialist economy will differ from that in a capitalist one, yet interest will perform its function.

4. The Future of Rate of Interest

What will be the future of the rate of interest ? It will obviously depend on the demand for loanable funds due to inventions etc. and the supply of loanable funds as society makes progress. In other words, it will depend on as Taussig said, " on a race between accumulation and improvement ." There are people who argue that the supply of loanable funds will fairly increase as a result of increase in the level of money incomes and secondly, as pointed out by Keynes, there will be a decline in the liquidity preference of the people. This group, thus, expects that the rate of interest will considerably decline in the future. But there is another group who thinks that demand for loanable funds in future will also rise due to new inventions and more modern tools of production. This group, therefore, does not expect any major fall in the rate of interest. The future, in fact, is so uncertain that it is rather difficult to side with either of the two groups.

LESSON NO. 1.2

MONEY : Evolution, Types, Significance, Functions and role in India**Introduction**

Social economy has always been, and probably will remain, a monetary economy. The expectations are of no significance. Small communities in isolation may do without money and barter system (direct exchange of goods and services with goods and services) may suffice under very primitive conditions. We might also conceive of a modern economy which is so completely planned that it does not use money. But as we shall discuss further, even in such an economy, money is indispensable for a variety of reasons. This suggests that this man-made instrument is particularly important for the modern economies.

Uses and Abuses of Barter System

Direct exchange of one commodity for another without the mediation of money is called barter. This system of exchanging goods for goods continued to prevail before the invention of money. Because of certain uses of barter system, it still prevails in certain backward parts of India and other underdeveloped countries. Particularly in villages, the direct exchange of goods for goods still prevails even in the most developed states of India. Wage payments to agricultural labourers in kind is nothing, but one manifestation of barter system.

The system of barter is simple. It increases co-operation and is usually free from the evils of money. This system is particularly suitable for primitive and self-sufficient pre-industrialised economies where the exchange requirements of people are limited. However, with increasing economic development, as the market economy and the exchange requirements expand, barter economy fails to deliver the goods. An increasing division of labour which is a necessary concomitant of development, gives rise to increasing exchange which encourages the ever improving monetary instruments. It is next to impossible that all wishes of individuals, who enter into barter system should coincide as to kind, quality, quantity, and value of the things which are mutually desired. This is especially true for a modern economy in which on a single day millions of persons may exchange millions of commodities and services. A medium of exchange which everyone is willing to accept easily overcomes the difficulties of barter because by splitting the actions of barter into purchases and sales which are independent of each other, the need is eliminated for people's wishes to coincide exactly as to quality, quantity, value, time and place. We can enumerate the following main difficulties of barter.

1. Lack of Double Coincidence of Wants

Under the barter system it is necessary that the wants of two persons who wish to exchange goods must coincide. Suppose X has wheat and he wants sugar.

Then X must find a person who has sugar and who is ready to exchange sugar for wheat. Barter thus requires double coincidence of wants, which in practice, is difficult to be found. However, goods can be exchanged for money which is usually the most acceptable medium of exchange.

2. Lack of Common Measure of Value

Barter system suffers from the fact that there is no common measure of value. In the above example even if X succeeds in finding out a person who is having sugar and is willing to exchange his sugar for wheat, the problem will not end here. For how much of wheat, how much sugar should be exchanged. The exchange of goods cannot take place until and unless the two persons agree to exchange some given quantity of goods with each other. Since there is no common measure in terms of which the values of different goods can be expressed, the ratio of exchange of two goods will be arbitrary and vary from person to person depending upon their intensities of wants for different goods.

Further, in this system the value of different goods will be expressed in as many terms as there will be the number of goods and services (including their different qualities and varieties). This value system would be very cumbersome and beyond the comprehension of an average person. Moreover, in this situation no meaningful accounting system is possible since it will be very difficult to keep account of a commodity, say wheat in terms of as many commodities as are exchanged for it.

3. Indivisibility of Commodities

Barter system fails in respect of many articles which are indivisible. Suppose a man is having a horse and he wishes to exchange his horse for wheat, rice, vegetables and so on. He cannot break his horse into pieces and then go to individual sellers of the above commodities to exchange pieces of horse with other commodities. Thus, certain commodities which are indivisible cannot be bartered away. However, this difficulty has been removed by the invention of money. Horse can be sold for money which can then be used for the purchase of different commodities. The rest of the money can be stored for other purposes. This brings us to another difficulty of barter i.e., storing of wealth.

4. Difficulty of Storing Wealth

In the above example, suppose the seller of horse does not want to spend all his sale proceeds from the horse instantaneously. Suppose he wants to store some of his sale proceeds for future needs. Under the barter system he can do this only by storing some commodities, say wheat. But wheat cannot last longer than one year. And that too would require a great skill. Obviously, life would be highly insecure without the use of money.

An idea about the difficulties of barter can be had by narrating the example of a famous French singer who gave her performance in an island where money was not used. She was paid in kind i.e., pigs, goats, apples, bananas and other fruits. This

should have made her richer. But in the course of her journey she found that pigs, goats and other animals had eaten away her fruits, and to keep them alive, she had to give many more performances so that she could earn enough to feed those animals.

5. Difficulty of Transporting Commodities

Under the barter system one has to transport goods and services from one place to another. Suppose a shepherd wishes to exchange his sheep for other commodities. Then he will have to travel a long distance along with his herd to find the sellers of commodities he wishes to buy and who are willing to purchase his sheep. In this process it is possible that the shepherd may lose a number of sheep on the way or he may be looted. The invention of money has saved us from the drudgery of transporting goods.

b. Other Difficulties

Besides the above mentioned difficulties, one can add many more. How to exchange different services under the barter system? How can a teacher be paid? How can one evaluate the services rendered by a musician or a doctor? Further, the process of borrowing and lending would be extremely difficult under the barter system. How to settle deferred payments, i.e., to calculate the rate of interest?

In nutshell we can say that barter system cannot cope with the development of a modern industrial society which is based on the division of labour. The workers are paid much before the final output i.e., they are paid daily, weekly, or monthly, whereas the final output may come after, say six months or one year. In certain cases this period may be much longer (e.g., in heavy industry). In the intervening period the workers and other factors of production will have to be paid. How to do this without the use of money? Thus, money has not only saved us from the inconvenience of barter, but maximum satisfaction out of limited resources has also become possible because of the use of money. In the words of Professor Robertson, "The need for money then seems to be fundamental, if a given volume of productive power is to be made to yield the greatest harvest of individual satisfaction which it is capable of yielding"

Evolution of Money

As already stated the barter system could not cope with the complexities of modern industrial society. The inconveniences of barter were pressingly felt by them when they tried to move out of the primitive economy and when their wants became diversified. Men began to think of some device which would save them from the difficulties of barter. The search for such a device resulted in evolution of money.

In a modern economy, incomes consist of wages, salaries, interest, rents and profits which are payments for the services contributed towards the manufacturing or sale of goods. Such payments are not received continuously and the dating of expenditure does not coincide with that of income received. No one spends the whole of his weekly or monthly income the moment it is received. To a considerable extent, therefore, money must necessarily act as a store of value by virtue of its use as a medium of exchange.

However, in the beginning money was used as a unit of account in terms of which all other goods and services were evaluated. For example, when a goat of a given size and weight was adopted as a standard, all other commodities were evaluated in terms of this goat. If a horse was worth 5 goats and 100 bananas worth one goat, then it was easily understood that 500 bananas were worth one horse. Thus, the value of everything was determined in terms of a standard goat.

It must be understood, however, that goods were still exchanged for goods. The only novelty was that the value of goods and services was determined in terms of a standard commodity, goat in our example. The commodity could be said to be of goat standard. This symbolises the birth of money.

This idea of adopting some commodity as standard of value in terms of which the values of all other commodities were assessed was an important invention of mankind considering that the adoption of some commodity as the standard of value (or unit of account) is a great invention. Crowther rightly remarks that, "To us this invention seems very simple. It is merely the application to the sphere of the same idea that has produced the foot or the meter to measure length, the pound or gram to measure weight, the degree to measure temperature, and so forth. But at that time it was doubtless radical. And it undoubtedly was an invention; it needed the conscious reasoning power of man to take the step from simple barter to money accounting."

The use of money as a unit of account did not spare the man from the inconvenience of barter. As already stated, goods were still exchanged for goods. So both the parties i.e., buyers and sellers had to be brought together to exchange their goods though indirectly through the use of a standard goat, a unit of account. This difficulty was removed when money was used as a medium of exchange. Money came into being which facilitated the exchange of goods and services much faster.

Apart from facilitating transactions by serving as a unit of account and a medium of exchange, the invention of money also made it easy to store wealth by serving as a store of value. In a barter economy a rich man was one who had a large store of physical things he needed i.e., large chunks of fertile land, large number of animals, big buildings and so on. But managing all these things was a difficult task. However, with the invention of money, nothing except money needed to be stored since money could purchase everything when required.

These three basic functions—a unit of account, a medium of exchange and a store of value, performed by a commodity constitute the invention of money. Thus, in the words of Crowther, "Money is one of the most fundamental of all Man's inventions. Every branch of knowledge has its fundamental discovery. In mechanics it is wheel, in science fire, in politics the vote. Similarly, in economics, in the whole commercial side of man's social existence, money is the essential invention on which all the rest is based."

Money and its Kinds

Money has been defined differently by different economists. Some like Walker define it in terms of its functions i. e., money is everything which is used as a unit of account or for facilitating exchange of goods or store of value. J. M. Keynes, D. N. Robertson and G.D. H. Cole lay stress on the legality of money. However, these definitions are not considered perfect as they do not lay stress on all the aspects of money. In this respect Crowther's definition is considered better. He defines money as "anything that is generally acceptable as a means of exchange (i. e., as a means of settling), and all the same time, acts as a measure and a store of value."

Kinds of Money

Ever since the invention of money it has been in circulation in different forms. The history of development of money shows that in the beginning, ordinary commodities like furs, skins, jaws of animals etc., were used as money. It was perhaps the beginning of a distinction between actual money and money of account. According to Keynes, money of account is that in which accounts are settled i. e., in which debts, prices and general purchasing power are expressed. On the other hand, 'money proper' refers to actual money or 'common money'. In the words of Keynes, 'we may elucidate the distinction between money and money of account by saying that the money of account is description or title and money proper is the thing which answers this description. But if the thing can change, whilst the description remains the same then the distinction can be highly significant. The distinction is then like between the king of England (whosoever he may be) and King George. A contract to pay a weight of gold equal to the weight of King of England is not the same thing as a contract to pay a weight of gold equal to the weight of the individual who is King George'.

Thus, actual money may change in its form and contents, but not money of account. For example, ever since the adoption of monetary system in India, though actual Indian Rupee has been varying in weight, size and the type of metal used, yet as a unit of account it has been the same. Broadly speaking, however, usually no distinction between 'money proper' and 'money of account' is made. However, at certain unusual times, they might be different. For example, during the war and post-war periods of hyper-inflation in Germany, although actual money was Mark, yet U.S. Dollar became the unit of account owing to its stable value in the face of rapidly depreciating Mark.

Money proper or common may be either **commodity money** or **representative money**. Commodity money is also termed as full-bodied money because the real commodity value of the money material and its face or legal value do not differ. In other words, its real value is equal to its face value. It may also be called standard money since the two values (real as well as face) of money are equal. Gold coins whose face value and real value are the same may be called full-bodied money or standard

money. According to Professor Robertson, full-bodied money may be defined as "Money whose value is not materially greater than that of its component stuff." In the words of Newlyn, "Clearly, money may have commodity value in different degrees. Originally gold had value which was identical (within very small limits) as a coin and as a commodity. If its commodity value rose above its coin value it ceased to be money and became a commodity, that is to say it was melted down into bullion. Similarly, if the coin value rose above the commodity value then the commodity gold became money that is to say it was brought to the mint to be coined."

Actual money which is not full bodied is called representative money. Professor Robertson defines representative money as, "Money whose value is materially greater than the value of the stuff of which it is composed". Representative money is so called because it derives its importance from the main money which it represents. Paper money and cheap metal coins are examples of representative money. Paper money, when inconvertible into specie (say gold) is commonly called 'fiat money' i.e., money by command. The 'fiat money' exists simply because of the authority of the government. Inconvertible currency notes of small and high denominations issued by the state or Central Bank are best examples of fiat money. As will be seen shortly 'fiat money' is an extreme example of token money. Thus, representative money can be :

1. Representative full bodied money.
2. Representative token money.
3. Fiat money.

Representative Full-bodied Money

Under the representative full-bodied monetary system, the holder of money is promised by issuing monetary authority the payment of full bodied coins or the equivalent quantity of gold (bullion) in exchange of money received. It is obvious that although representative full-bodied money has no value of its own, nevertheless as a medium of exchange it represents a certain quantity of specie whose commodity value is equal to the legal value of the money it represents. U.S. Gold Certificates which were circulated in U.S.A. before 1933 were an ideal example of representative full bodied money because they were fully backed by the required quantities of gold.

The representative full bodied money is issued on the same principles on which the full bodied commodity money is issued. Since the issue of the representative full-bodied money is to be accompanied fully (100 percent) by the reserves of gold or other precious metals, the danger of over-issue of currency is ruled out. Representative full-bodied money is better than full-bodied commodity money in many respects. Firstly, it will do away with the heavy cost of coinage which must be incurred in case of full-bodied money, Secondly, the loss of precious metals, which is associated with the conversion of gold into coins and with the handling of such coins, is less in case of representative full-bodied money. Thirdly,

representative full bodied money has the added advantage of easy transportability. Against these advantages, however, its only disadvantage is that it lacks durability and it can be easily lost.

Representative Token Money

Under the representative token money system the holder of money is entitled for token coins or for equal weight of gold by the monetary authority. It resembles its counterpart, the representative full-bodied money, in all respects except that the commodity value of bullion or coin kept as reserves is less than its value as money.

Since representative full-bodied money always carries its real value with it, it is acceptable not only in the country of origin but also in other countries. Usually full-bodied representative money carries a greater confidence of people than token money. People accept it in payment of transactions without hesitation. From this, however, it does not follow that full-bodied money is always better than token money. Under certain circumstances, token money may be more useful than full-bodied money. In the last quarter of the 19th century, most of the countries adopted gold standard replacing silver standard. This led to the fall in the price of silver. Let us assume that there was a country which continued at the official price, this would have encouraged the imports of silver (whose price had fallen in other countries), thereby increasing the money supply and hence endangering inflation. Thus, a full-bodied money does not always guarantee against price instability.

On the other hand, if the country suspends full-bodied money in favour of token money, the free coinage of silver (as implied in the full bodied money) will automatically stop which will not encourage the import of cheap silver. Thus, replacing token money in favour of full-bodied money will ensure greater price stability. The point of emphasis is that neither the full-bodied money nor the token money are good or bad under circumstances.

Fiat Money

Fiat money, as the name implies, circulates in the country by the formal command of the state. The main features of 'fiat money' are :

1. It has little or no value as a commodity.
2. It is non-redeemable in any commodity whose value is equal to its face value.
3. Its purchasing power is not kept at par with that of gold or silver in which it might have been formerly convertible.

Generally, 'fiat money' consists of paper currency and inconvertible bank notes of different denominations. For example, different currency notes, say Rs. 100 or Rs. 500 are hardly worth one paisa as a piece of paper on which it is printed. However, it should be emphasised that this characteristic of fiat money does not distinguish this from other kinds of money, particularly representative full-bodied paper currency. In the latter case also, the representative money itself hardly

possesses any value. Yet it is not a fiat money. Therefore, something more than the mere fact that 'fiat money' has no real value is needed before a particular money could be called fiat. This distinguishing feature of 'fiat money' is that it cannot be redeemed in gold. So long as full bodied representative money can be converted into gold at the discretion of its holder, the country would not be on a fiat money standard.

Now-a-days we are so much used to fiat money that we never care for its fiat characteristic. Fiat money standard imparts elasticity to the monetary system of the country. It allows the supply of money to be adjusted to the needs of a growing economy. Money supply under the fiat system is fully controlled and not left to the exigencies of availability of gold or other precious metals. Depending upon the need of different countries (both developed and underdeveloped) the supply of money can be increased or decreased.

But fiat money is not a panacea for all economic ills. It always carries along with it the danger of over-issue of currency which will endanger the stability of an economy. Since fiat money of a country is not linked with that of other country, foreign exchange rates continue to fluctuate which endanger the normal flow of international trade.

Other Kinds of Money

Some economists emphasising the general acceptability of money have classified money into legal tender money and optional money (also called bank money or credit money or customary money). Optional money is that form of money which may or may not be accepted in the discharge of debt like bank cheques and drafts. Legal tender money, on the other hand, is used for settlement of payments without invoking legal punishment. Legal tender money is of two types :

1. Limited legal tender money : It is one which is accepted as legal tender only upto a certain limited amount like coins of low denominations, say one paisa, two paise or even ten paise.
2. Unlimited legal tender money : It is one which is accepted in the discharge of obligations up to any amount.

Significance of Money :

We have already dealt with the inconveniences of barter which man had to face in the absence of money. In a barter economy, double coincidence of wants was the prerequisite for the exchange to take place. Further, indivisible commodities could not be bartered. In fact, barter system assumed a primitive society with people having limited wants. But as the economy expanded, and more so in the present society, barter failed to deliver the goods and hence the invention of money. The significance of money can only be appreciated if money is removed from the economic system even for a single day. However, we shall discuss the importance or significance of money with reference to two famous and extreme forms of economic systems viz-capitalist system and socialist system.

Money in the Capitalist System

The capitalist economy is not regulated by a central planning board. The factors of production are privately owned and are used according to the free-decisions of their owners who are also free to spend what money they earn by selling these factors. If they decide not to spend their earnings i.e., they wish to save, they are free to do so. The use of these savings for the production of capital goods is again dependent on private initiative.

The millions of individuals in a modern capitalist economy, not being self-sufficient are co-operating in a gignatic production process. Since there is no central planning board to decide about the problem of production and distribution, we have to ask such questions as: How does each person find his place in this process ? How would producers decide as to what to produce, where to produce and how much to produce? How will the total product be distributed? The answer to all these questions will be found in the analysis of pricing process of which money is an integral part in the capitalist system. The following points will clearly bring out the importance of money in capitalist system :

(1) First of all, the use of money divides the exchanging people into sellers and buyers and splits barter into market supply and demand. Supply and demand determine market prices which are exchange values expressed in units of money. The direction of production is determined according to the existing and expected price. The difference between these two sets of prices means profits or losses for producers. According to expected profits or losses production will be expanded or contracted. All production in the modern era rests on economic calculation i.e., on the comparison of monetary quantities.

(2) Money is an indispensable condition for the development of a credit market. In a barter economy, it is possible to borrow goods against the promise to give these goods or other goods back after a certain period. In this case we should have as many credit markets as we have different kinds of goods which may be subject to borrowing. It would be impossible to have a uniform credit market for the special economic service involved viz the exchange of present for future goods. The development of a money market (or credit market) is the condition of the formation of a uniform price for a uniform service. What people demand and supply in this market is not the disposal of special goods and services but the disposal of money for a certain period of time, the disposal of money by the use of which other goods may be procured. Loans find their ideal expression in money and it is the monetary economy alone in which it is possible to express the price of loanable funds in the form of interest rate.

(3) Money greatly helps consumers as well as producers to exercise their free choice. Free choice of consumption implies the use of money because free choice can be exercised only if limited purchasing power at the disposal of consumers can

be spent in small amounts in alternative uses. This job can be performed by money only. A moneyless economy would have to use a system of rationing i.e., distributing the social product in a predetermined proportion. Freedom of choice of consumption would be abolished. Likewise the guiding principles of producers i.e., what, where and how much to produce are all determined by monetary reward.

(4) Money may be regarded as a common denominator for subjective valuations on the assumption that the amount of purchasing power spent on a commodity measures objectively the relative importance of satisfaction to the purchaser. However, this assumption is highly artificial because money income of different persons are unequal.

(5) In a perfectly working credit market, savings are sure to be borrowed by those who want to buy capital goods or to increase their consumption beyond the limits of their income. However, money may turn out to be a disturbing factor in the credit market and in the economy in general. Money may be hoarded and total demand may be reduced with the further consequences of reduced production, unemployment and a further fall in demand. It may also happen that lowest practicable rate of interest is not low enough to induce the necessary amount of investment and that money remains idle with consequences similar to those of hoarding. On the other hand, money dishoarding as well as hoarding, change the basic assumption of the barter economy that supply creates its own demand. It had been assumed for a long time that nothing worse could happen than the partial over-production of commodities which would immediately be remedied by the necessary adjustment in relative prices and in production. That there would be a general deficiency in purchasing power was unthinkable. This was unwarranted optimism. Purchasing power can be destroyed with disastrous consequences for the economy just as it can be created with favourable or unfavourable effects depending upon the state of employment and numerous other factors.

(6) Among the disturbing effects of money, those changes in the general level of prices which are known as inflation or deflation are most obvious. If money is supposed to be a unit of account, its own exchange value should remain comparatively stable. The value of money is expressed by its ability to buy and this ability is decreased when prices increase and vice versa.

Money in the Socialist Economy

We have seen that by the use of money, not only it is possible to overcome the clumsiness of barter and to extend the division of labour, but at the same time money is the basis of pricing process by means of which the economy is guided. But unless it is planned in every detail with complete foresight that individualistic economic calculation is rendered unnecessary. However, it should be noted that in practice as well as in theory, modern planned economies too have made use of the price mechanism.

Lenin, for example, admitted in October 1921 that they were greatly mistaken that

Russia could reach even the initial stage of communism without passing through a period of socialistic calculation. Trotsky asserted that a plan had to be checked and, to some extent, realized through the mechanism of the market. He admitted that "the blue prints produced by the offices must demonstrate their economic efficiency through commercial calculation. Without a firm monetary unit commercial accounting can only increase the chaos."

Some writers argue that abolition of free choice in consumption (which is the necessary concomitant of the economy where resources are allocated by some apex planning body) would do away with the necessity of pricing process. It is true that the problem is made less complicated if we let a central authority decide what is to be produced. Nevertheless it remains indispensable to have a pricing mechanism without which "it is impossible for an economic system of any complexity to function with any reasonable degree of efficiency." The scarcity of the means of production does not allow us to produce whatever we want to produce. Even if the aims of production should be determined by a director, the allocation of resources according to these aims, would have to be the result of the working of a pricing process by means of which it is possible to compare the usefulness of the available resources in different fields of employment. Thus, we may safely conclude that even a socialist economy will remain a monetary economy if it is to operate with some degree of efficiency.

LESSON NO. 1.3

MONEY AND CAPITAL MARKETS IN INDIA**INTRODUCTION**

Financial markets may be broadly classified as negotiable loan markets and open markets. The negotiable loan market is a market in which lenders and borrowers personally negotiate the terms of the loan agreement. A business person borrowing from a bank and an individual borrowing from a small loan company are examples of negotiated loans. In contrast, the open market is an impersonal market in which standardized securities are traded in large volumes. Buyers and sellers may never meet. Stock market is an example of an open market. The open market provides the binding that ties the country's financial institutions together into an integrated whole. It is only with the open market that we will be concerned with in this and the next lesson.

This lesson is divided into three sections. Basic knowledge about money market and characteristics of a developed money market are discussed in the section I. Section II deals with the various components of money market. Money market in India and its development is a part of section III.

MONEY MARKET

Money market is a market for short-term (less than one year) loans. In fact, its very name suggests that it is money which is being bought and sold. It is used by business firms for purchase and shipment of inventories, by finance companies to finance consumer credit, by banks to finance temporary reserve shortage and by government to bridge the gap between tax receipts and expenditure. The money market is not a place, but an activity.

A supplier of funds to the money market can be virtually anyone with a temporary excess of funds, for example, a corporation may be accumulating funds for a quarterly income tax payment, and rather than holding the funds in demand deposits (non-interest bearing), the corporation may decide to lend them out for a short-term. A commercial bank may know from experience that it will have large seasonal deposit withdrawals shortly, but in the meantime it may invest the money in earning assets.

The best way to a clear impression of the money market is to understand the mechanism of the various debt instruments traded in it. The description of the money market involves both the instruments and institutions. All the money markets, though constituted differently, have institutions which have somewhat similar character.

CHARACTERISTICS OF A DEVELOPED MONEY MARKET

A developed money market is one which is comparatively efficient in the sense that it is responsive to changes in demand for and supply of funds in any of its segments. The effects initiated in any part of it, quickly spreads to others without significant time

lag. In order to satisfy these criteria it should have the following characteristics:

(a) Presence of Central Bank

Central bank has a greater capacity of judging the needs of the market as regards its financial requirements and can devise its monetary policy to suit the objectives. It can vary the supply of cash and easily meet the seasonal variations in demand for liquidity by rediscovering the commercial paper. It can supplement this task by varying the minimum reserves to be maintained by the banks, the bank rate and use of selective credit controls etc.

(b) A Developed Commercial Banking System

For a developed money market not only the banks should be well developed and organised, but the public should also have a widespread banking habit. Widespread banking habits of the public enable banks to operate on low fractional reserves.

(c) Variety and Quantity of Financial Assets

It is essential that there should be an adequate supply of a variety of short maturity financial assets. In developed money markets there is an abundance of commercial bills, bills of exchange, treasury bills and so on.

(d) Sub-markets

A developed money market will have developed and sensitive sub-markets. Absence of such markets or lack of their responsiveness to small changes in interest and discount rates, does not make it a developed money market.

(e) Existence of Specialized Institutions

The existence of institutions specializing in particular types of assets help in making the money market competitive and efficient. Acceptance houses and discount houses are important examples.

(f) Contributory Legal and Economic Factors

Appropriate legal provisions go a long way in the development of money market. The transaction costs of commercial bills should be quite nominal. In India, one of the reasons for non-development of bill market happens to be the high stamp duty payable on them. Similarly, the dealers in bills should have a legal protection against default of payment and remedial provisions should not be very time-consuming.

Money market would remain undeveloped if one or more of above conditions are not satisfied.

INSTRUMENTS OF MONEY MARKET

Money market works through market instruments. Let us now discuss various instruments of money market one by one.

Call Money

Call money loans are extremely short- term loans which are repayable on demand within a day. They are made by commercial banks and other financial institutions who

can afford to spare funds in large amounts, though for short periods. The maturity period is between 1 to 15 days. The demand for such loans comes from those financial institutions which specialize in discounting or rediscounting bills.

The call money market operates through brokers who keep in constant touch with banks and bring the borrowing and lending banks together. The main function of the market is to redistribute the pool of day to day surplus funds of banks among other banks in temporary deficit of cash. The call money market is a highly competitive and sensitive market. It registers very quickly the pressure of demand and supply for funds operating in the money market. The funds are borrowed or lent without any collateral security. The rate of interest paid on call loans is called call rate.

Treasury Bills

The market which deals in treasury bills is termed as treasury bill market. These bills are short-term liability of the government. Treasury bill is a particular kind of finance bill, (which does not arise from any genuine transaction in goods) a promissory note put out by the government of a country. They are issued to meet temporary needs for funds of the government arising from temporary excess of expenditure over receipts. Treasury bills are of two kinds: adhoc and regular. Adhoc means for the particular end or case at hand. Adhoc treasury bills are issued for providing investment outlets to state governments, semi-government departments etc.

Regular Treasury Bills (or ordinary TBs) are sold to general public and banks. They are freely marketable. In India, their buyers are almost entirely commercial banks.

Treasury bills are bought and sold on discount basis. The amount of interest due on it is paid in the form of discount in the price charged for the bill. This price is, thus, lower than its face value by the amount of interest due on the bill. For the government, treasury bills are an important source of raising funds. In India, treasury bill rates are very low which, in turn, keep the interest cost of treasury bill debt to the government very low.

Commercial Bills

The market dealing in commercial bills is known as commercial bill market. These bills are issued by firms engaged in business. Generally, they are of three months maturity. They are like post-dated cheques drawn by sellers of goods on the buyers of goods for value received.

An example of typical bill of exchange is given below :

Patiala, Oct. 15, 2012

Mr. Sharma,

Three months after date please pay to the undersigned or order of the sum of Rupees thirty thousand for value received.

Mr. Khurana

In this example, Mr. Khurana is the drawer of the bill and Mr. Sharma is the drawee. The former has sold the latter goods worth Rs. 30,000/- on three months credit. The seller may need cash now, so he draws a bill and sends it to the buyer for acceptance. The latter, in acknowledgement of his responsibility to make payment on the due date, writes 'accepted' on the bill, or arranges to get the bill accepted on his behalf by his bank. Once the bill has been so accepted, it becomes a marketable instrument. On receipt, the drawer can now sell it in the market for cash. The bank, again, normally comes into picture. The drawer goes to his bank and gets the bill discounted. This simply means that he sells it for cash to the bank which pays him the face value of the bill less collection charges and interest on the amount for remaining life of the bill. The rate of interest charged is known as the discount rate on bills.

A Commercial Bill is, thus, a written instrument containing an unconditional order, signed by the maker directing a certain person to pay a certain sum of money only to, or to the order of, a certain person, or to the bearer of the instrument. Being a negotiable instrument, it can change ownership.

While in developed economies, commercial bills are a major portion of the money market, but in underdeveloped countries this is not the case, for various reasons. These economies have a practice of trading through payment rather than buying on credit. Also, for a genuine bill market to develop it is essential that the bills should be drawn in a largely accepted conventional form and the banks and other agencies of repute should be ready to stand guarantee for the credit worthiness of the drawee of the bills.

Commercial Paper (CP)

Commercial paper consists, very simply, of the unsecured promissory notes of large corporations. The corporations are sufficiently well-known so that their credit worthiness is not in doubt. Their promise to pay can consequently be bought and sold in an organised market. The commercial paper generally carries a maturity of 4 to 6 months and is used by the issuers as a supplement to borrowing from commercial banks. These are also known as Industrial Paper, Finance Paper Corporate Paper etc. CPs are sold either directly by the issuers to investors or through agents like merchant banks and security houses. In India, CPs are privately placed with investors through banks or financial institutions. These are used to raise short-term finance to meet working capital needs. These are issued in domestic as well as international financial markets. These are rarely issued to finance fixed assets or permanent capital.

Certificates of Deposits (CDs)

A CD is a document of title to a time deposit. A certificate of deposit is a certificate given by a commercial bank that certifies that a deposit has, in fact, been made. The certificate stipulates that the deposit cannot be withdrawn before a certain date and that, upon that date, the bank will repay the deposit plus interest. This period is generally of

three months. Certificates of deposit are of two kinds : non-negotiable and negotiable. A non-negotiable certificate of deposit must be redeemed by the original depositors. A negotiable certificate of deposit, however, may be resold by the depositor in the money market and may change hands several times before it matures. Whosoever owns the negotiable certificate of deposit on its maturity date, of course, claims the deposit and interest from the bank.

The above mentioned instruments are the basic constituents of the money market. The market operates through these instruments. Development of any economy can also be judged from the development of its money market.

MONEY MARKET IN INDIA

Until 1935, the country had no central bank. The government had the right to issue currency. The banking structure was very fragile and bank failure was very common. The money market that existed in pre-independence period was far more undeveloped than what it is today. Now the Indian money market is a leading money market in third world countries.

Indian money market is broadly divided into two parts, viz. the unorganised and the organised. The unorganised sector of money market comprises the indigenous bankers and money-lenders. They charge comparatively high rates of interest. Unlike the modern banking system there are little business relations among them. The organised sector is fairly integrated. Both private and public sectors constitute the organised sector. The RBI is the central bank, and it is the apex organisation in the Indian money market.

No doubt, the organised sector of the Indian money market is fairly developed and organised, yet it is not comparable to the New York or London money market.

Broadly, the principal constituents (sub-markets) of Indian money market are : (i) the call money market, (ii) the treasury bill market, (iii) the commercial bill market, (iv) certificate of deposit market and (v) the commercial paper market.

(i) The Call Money Market

Scheduled Commercial Banks, Co-operative Banks and Discount and Finance House of India operate in it as lenders and borrowers. As a special case, institutions like Unit Trust of India, Life Insurance Corporation of India, General Insurance of India, Industrial Development Bank of India and the NABARD are allowed to operate in the call money market as lenders. Among the banks, the State Bank of India, on account of a strong liquid position is invariably on the lender side of the market. The call money market, on account of its highly sensitive nature, is considered to be the most appropriate indicator of the liquidity position of the money market. The RBI, therefore, takes note of it in adjusting day to day monetary policy.

The call money market remains largely confined to big industrial and commercial

centres like Mumbai, Kolkata, Chennai, Ahmedabad, Bangalore etc.

(ii) The Treasury Bill Market

The treasury bills are short-term (91 days, 182 days, 364 days, and 14-days) liability of the central government. In these days, in India treasury bills have become a permanent source of funds for the central government as every year more new bills are issued than those that are retired. Further, every year a part of treasury bills held by RBI is converted into long term bonds. The treasury bill market in India is highly underdeveloped. Except RBI there are no major holders of these bills. Infact, even the RBI is a passive or captive holder of these bills which implies that it is under an obligation to purchase all the treasury bills presented to it by banks and others for this purpose. This has resulted in monetization of public debt and has become a major source of inflationary expansion of money supply.

(iii) The Commercial Bill Market

In India, this market is highly undeveloped. Generally, cash credit system of bank lending is popular. Among other factors which have prevented growth of genuine bill market are lack of uniformity in drawing bills, high stamp duty on the bills and the practice of selling on credit without specified time limit. RBI has made efforts to develop a bill market in this country and popularise the use of bills. Its two specific bill market schemes, however, had limited success. The old bill market scheme introduced in January 1952 was not correctly designed to develop a bill market. It merely provided for further accommodation of banks in addition to facilities they had already enjoyed. In order to encourage use of bills the RBI offered loan at a concessional rate of interest and met half the cost of stamp duty incurred by banks on converting demand bills into usance bills. This scheme, however, failed to make any impact.

Not satisfied with the old scheme, the RBI introduced a new bill market scheme in November 1970. The noteworthy features of new scheme are:

(i) The bills covered under the scheme are genuine trade bills and (ii) the scheme provides for their rediscounting. This scheme really aimed at developing a bill market in the country, but has not been very successful.

(iv) The Certificate of Deposit Market

The certificate of deposits were introduced in Indian money market in 1989 with the objective of widening the range of money market instruments and to provide investors greater flexibility in deployment of their short-term surplus funds. The CDs can, be issued by the scheduled commercial banks. CDs are subject to SLR and CRR requirement. There is no ceiling on amount to be raised by banks. Minimum maturity of CD has been reduced to 15 days w.e.f. 2000-01. Minimum size of issue has been reduced from Rs. 5 lakhs to Rs. 1 lakh in June 2002. In 1992, other financial institutions like IDBI, IFCI etc. were permitted to issue CDs with maturity of 1-3 yrs.

(v) The Commercial Paper Market

The commercial papers were introduced in Indian money market in January, 1990. The commercial paper is issued by companies with a tangible net worth of Rs. 5 crores. The CP is to be issued in multiples of Rs. 25 lakhs subject to a minimum issue of Rs. 1 crore. The maturity of CPs was between 3 to 6 months. However, now the minimum size stands reduced to Rs. 5 lakhs, the maturity period is modified to 15 days upto 1 year; guidelines for issue of CPs have been relaxed; CP issues are now delinked from working capital. The minimum credit rating shall be P2 of CRISIL or such equivalent rating by other approved agencies. The CPs are issued at a discount to face value and the discount rate is freely determined. The purpose of CPs in Indian money market is to enable high level corporate borrowers to diversify their sources of short-term borrowings on the one hand and provide an additional instrument to banks and financial institutions in the money market, on the other.

Problems Facing the Indian Money Market

Money market in India suffers from several defects as a result of which it is not yet considered as a developed money market. Following are the problems facing this market.

- 1. Presence of Unorganized Sector of Money Market :** The Indian money market comprises of several types of private lenders who are not under the control of RBI. Due to this, it becomes difficult for the monetary authority to regulate and implement its monetary/credit policies. This unorganized sector does not differentiate between short and long-term finance, or even the purpose of finance. As such, they do not follow the credit policy of the RBI.
- 2. Seasonal Stringency of Money :** The Indian money market suffers from seasonal stringency of money and the resultant high rates of interest. During slack season the banks have surplus funds and suffer as a result of dipping rates of interest. Hence money rates of interest fluctuate widely, adversely affecting the economy.
- 3. Near Absence of Bill Market :** A bill market is extremely useful for expanding credit. But despite efforts made by the RBI, the bill market in India is underdeveloped. This is mainly because till recently banks had to keep large amounts of cash as statutory reserves. There is a general preference for borrowing rather than rediscounting bills and for cash transactions. An underdeveloped bill market also leads to shortage of funds.
- 4. Highly Volatile Call Money Market :** This is another problem of the Indian money market. The call money rates fluctuated from as high as 70 percent to 4 percent during 1990-91, although by 2005-06, the fluctuations had been considerably captured (between 8.25 percent and 3 percent). The high rates reflect the huge demand for short-term funds by banks specially to meet their CRR requirements.

5. **Inadequate Money Market Instruments :** The Indian money market does not possess an adequate and continuous supply of short-term assets (i.e., money market instruments). As a result banks with surplus funds are unable to invest these profitably in the short period and those who require short-term funds are unable to raise them.
6. **Lack of Specialized Dealers:** There are few specialized dealers in short term assets in India who can act as intermediaries between the Government and the banking system. The establishment of Discount and Finance House of India in 1988 has solved this problem but only partially.
7. **Lack of Cordination:** There is no co-ordination between the different sections of the money market as a result of which there are differences in the money rates in different sub-markets.

In its organisation and development, the Indian money market is not comparable to either the London money market or the New York money market. It suffers from a number of defects such as lack of integration because the organised and unorganised segments are working separately. The structure of interest rate is not rational due to the lack of adequate coordination between different banking institutions and policy of RBI. The bill market is not fully organised and there is shortage of funds in the money market. Moreover, there are inadequate banking facilities in India.

MAJOR REFORMS IN' INDIAN MONEY MARKET

A systematic review of the Indian money market was undertaken by the Vaghul working group in 1987. Since then, a number of steps have been taken to improve the efficiency of the Indian money market. Some of these steps are as follows :-

1. Ceiling on call money rate has been withdrawn. All money market interest rates are, by and large, determined by market forces.
2. Selected institutions are allowed to borrow from the money market on a term basis.
3. The base of call money market has been widened by selective increase in the participants as lenders.
4. CDs were introduced in 1989, CPs in 1990, and guidelines relating to them are modified from time to time. Institutions like IDBI, IFCI and ICICI were permitted to issue CDs with a maturity of one to three years.
5. A number of institutions have been set up like Discount and Finance House of India (DFHI), Securities Trading Corporation of India (STCI) to promote orderly development of money market. They are allowed to participate both as lenders and borrowers in the call money market.

The DFHI was set up in January, 1988 jointly by the Reserve Bank, Public Sector banks, and the All India Financial Institutions to deal in short- term money market

- instruments, enlarge the number of participants in the call, short notice, and term money market by allowing financial institutions and mutual funds to participate as lenders. It moderates the volatility in the inter bank call money market by providing liquidity in the market as and when required. The STCI was set up on June 7, 1994 to develop an institutional infrastructure to act as base for an active secondary market in govt. dated securities and public sector bonds. It can also hold short-term money market assets like TBs.
6. Issue of adhoc 91 day TBs to finance the budget deficit of the government was discontinued and a scheme of Ways and Means Advances (WMA) by the RBI to the Central Govt. was introduced with effect from April 1, 1997. Auction of 91-days TBs commenced from 1993. Also, TBs of various maturities such have been introduced.
 7. In April 1991, RBI announced the introduction of Money Market Mutual Funds (MMMFs). The main objective was to provide small investors an investing opportunity yielding market related returns, help in broad basing money market by providing more participants and help in mobilising household savings. The private sector was allowed to set up MMMFs in 1995. Also, UTI, IDBI, ABN Amro Bank and Bank of Madura Ltd. have been given clearance to set up MMMFs. Since March 2000, MMMFs have been brought under the purview of SEBI regulation.
 8. The minimum lock-in period for money market instruments was brought down to 15 days.
 9. Repurchase auctions (Repos) have been introduced since December 1992 in respect of Central govt. securities. If the banking system experiences liquidity shortage then RBI purchases govt. securities from banks and injects liquidity into the system. Since 1996 RBI has introduced Reverse Repos i.e., it sells govt. securities to banks to help them park their surplus funds. This policy of Repos and Reverse Repos is called Liquidity Adjustment facility (LAF).

Despite these reforms, the Indian money market is yet to acquire depth. Interest rates continue to be highly volatile. Moreover, the grand scheme of liberalisation and globalisation of money market has brought up many distortions without enhancing efficiency of institutions and allocation of resources. In our economy where the rural sector dominates, and the unorganised money market still plays an important role, money market reforms should start from reorganising rural financial structure.

CAPITAL MARKET AND ITS DEVELOPMENT IN INDIA

Capital market is the market for long-term funds, just as the money market is the market for short-term funds. It refers to all the facilities and the institutional arrangements for borrowing and lending term funds (i.e., medium-term and long-term funds). It does not deal in capital goods, but is concerned with the raising of money capital for purpose of investment. The demand for long-term money capital comes predominantly from private sector manufacturing industries, agriculture, and from the government largely for the purpose of economic development. As the central and state governments are investing not only on economic overheads as transport, irrigation and power development, but also on basic industries and sometimes even consumer goods industries, they require a substantial sum from the capital market. The supply of funds for the capital market comes largely from individual savers, corporate savings, banks, insurance companies, specialized financial agencies and the government.

The capital market can be usefully divided into the primary market and the secondary market. The primary market deals with the selling of new securities when they are first issued by the issuing corporation. Since many of the initial buyers of these securities will eventually want to resell them, there is a secondary market for previously issued securities. The stock market, for example, is a secondary market in corporate securities.

THE PRIMARY MARKET

When a corporation decides that it wants to acquire new funds from the outside, it will frequently do so through the intermediation of an investment banker. Investment bankers are specialists in the marketing of new securities. They advise the corporations in the design of the security - what type of security should it be common stock, preferred stock, or bond; if a bond, what rate of interest should it bear, what should be its maturity provisions, and so on - so that it will best serve the needs of the corporation and the buying public. Although there are a number of possible arrangements, the investment banking house will typically underwrite a new issue of securities. The investment house assumes a substantial measure of risk in an underwriting operation, large issues of new securities usually will be syndicated among several investment banking firms.

Many corporations engage in the private placement of securities. Private placement means that the issuer of securities sells them directly to the investors, without the underwriting services of an investment banker. This method of marketing new issues has a number of advantages, foremost among these are that it is cheaper since underwriting costs are avoided.

THE SECONDARY MARKET

The secondary market in corporate securities can be sub-divided into two parts, the registered stock exchange and over-the-counter market.

(1) Stock Exchange:

Stock exchanges are voluntary associations of members who come together for the purpose of buying and selling, for the general public, the securities of the big corporations. Only certain securities are traded on the exchanges, the so-called listed stocks and these are bought and sold by auction. Since the members of exchanges generally have branches throughout the country, the stock exchanges are truly a national market in which virtually anyone may participate.

(2) Over-the-Counter Market

The over-the-counter market is the market for those securities not listed on the stock exchanges. Used in the broadest sense, it includes all transactions in securities, other than those taking place on the national stock exchanges. The over-the-counter market has very low entry barriers in which traders may range in size from very large houses doing an international business to one-person firms that trade only in local markets.

Economic Functions of the Secondary Market:

The role of secondary market is to make the primary market possible. Suppose, for example, a corporation needs to buy a machine with a life expectancy of twenty years. It may want to issue a twenty year bond to do this. But who would buy such a bond if they had it for full twenty years. With a secondary market, the initial purchaser of the bond knows that, if necessary, it can be resold to someone else in a year or two. In this fashion, the secondary market in securities is said to give liquidity to primary issues.

GOVERNMENT SECURITIES MARKET :

In most of developed and underdeveloped countries, large quantities of government securities are issued, to finance government operations and to re-finance maturing debt. This mechanism is sometimes known as debt management. The treasury can issue new government debt instruments and sell them to financial institutions and general public. (These securities are not available to general public in most of the less developed countries).

These government securities can be of two types :

- (i) Marketable government securities
- (ii) Non-marketable government securities

The securities that can be sold in the secondary market are termed as marketable securities and those that cannot be sold in the secondary market are known as non-marketable securities. The investors in government securities are the commercial banks, LIC, GIC and provident funds. The latter are often compelled by law to invest a certain portion of their funds in these securities and, therefore, it is referred to as the capital market for government securities. This market is an over the counter market.

THE INTERNATIONAL CAPITAL MARKET

The central feature of such a market is that it makes possible the lending and borrowing of the funds in a currency outside the country of its origin. For example, it became possible for an Englishman, in London, to lend dollars to another Englishman in London. The capital market aspect of such a market is called the Eurobond market.

The Eurobond market is a market where bonds are denominated in a currency other than that of the country in which they are issued. For example, a French firm may engage a German investment banking syndicate to sell dollar-denominated bonds, and Italian and English investors may be the principal buyers of such bonds. It is particularly in this broader sense that Eurobond market is international in character.

CAPITAL MARKET IN INDIA

Indian capital market before independence could not develop, since there were few companies. Most of the British enterprises in India looked to the London capital market for funds. Individual investors were few and limited to the upper class in urban areas. Specialized issue houses could not develop in India and managing agency system performed to some extent the function of promotion, issue and underwriting of new capital issue.

Rapid expansion of the corporate and public enterprises since 1951 has necessitated the development of capital market in India. Indian capital market is divided into the gilt edged market and industrial or corporate securities market. The gilt edged market refers to the market for the government and semi-government securities backed by Reserve Bank of India. The securities traded in this market are stable in value and subscribed by the banks and other financial institutions. The industrial securities market refers to the market for shares and debentures of companies.

The government securities differ from industrial securities market in many important respects:

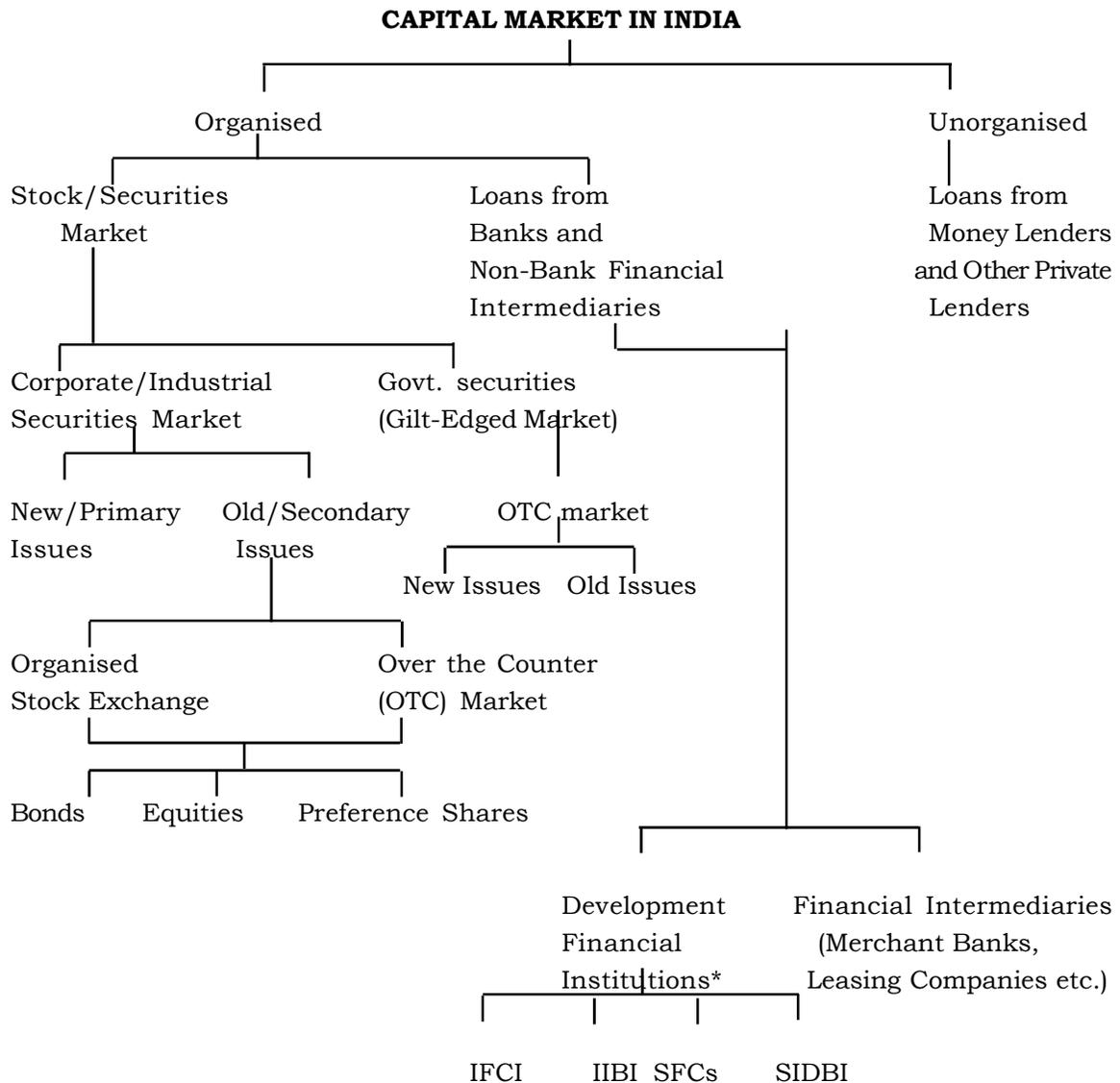
- (i) More uncertainty regarding yield, management, addition to capital etc. is involved in industrial securities.
- (ii) Financial institutions are compelled by law to invest a specified part of their demand and time liabilities in government securities.
- (iii) The average value of the transactions in the government securities market is very much larger than in the case of shares and debentures of the companies.
- (iv) Gilt edged market is 'over-the-counter' market.
- (v) RBI plays a dominant role in the gilt edged market through its open market operations.

Capital market in India started growing after independence. A very important indicator of the growth of the capital market is the growth of joint stock companies or the corporate sector. The volume of capital market transactions has increased sharply, its

functioning has been diversified. New financial instruments have appeared in the market.

Specialized financial institutions set up after independence to promote the industrial growth have been doing a useful work in subscribing to the shares and debentures of new and old companies, giving loan assistance, underwriting new issues and so on.

The following table will give us an idea about the structure of capital market in India:



* IDBI and ICICI are no longer included, as these are banks now.

The **stock/securities market** deals in long-term government and non-government securities.

The **corporate securities** are instruments for raising long-term corporate capital from the public. The **new issue market** arranges for the raising of new capital by corporate enterprises (old and new). It takes the form of equity shares, preference shares or debentures. The services of a network of specialized institutions is required to act as underwriters and stock brokers. In India, such institutions are ICICI, IDBI, GIC, LIC, UTI etc. There are three main ways of floating new issues: (a) by issue of prospectus to public (giving details about the company, issue, underwriters etc.); (b) by private placement with a few big financiers. This saves the company the expenses of public placement and is also time saving; (c) by the rights issue to existing shareholders in a fixed proportion to their shareholding. Such an issue is usually offered at a discount from the going market price of the already trading shares of the company.

The **old issue market** deals in existing securities. It also acts as an indicator of investment climate in the economy. There are two segments of the old issue or secondary market (a) the organized stock exchange and (b) over the counter market.

The **stock exchange** is an organization for orderly buying and selling of listed (approved) existing securities; an association of persons or firms to regulate and supervise all transactions rules, regulations and standard practices to govern all market transactions, authorized stock brokers and an exchange floor or hall where stock brokers or their authorized agents meet during fixed business hours to buy and sell securities. Only listed securities are traded on stock exchange. The listing or approval depends on size of issue, whether it is widely held by public, timely production of annual accounts etc.

The **over-the-counter (OTC) market** deals in securities not listed on an organised stock exchange. These are securities of small companies having only a limited market. Their prices are determined through direct negotiations between stock brokers and not through open bidding (as in the case of listed securities). OTC market was established in India in 1992. It operates at Mumbai with regional windows at other metropolitan cities.

The **gilt-edged market** is the market in government securities or securities guaranteed by the government. The latter includes securities issued by local authorities and autonomous government undertakings like banks, state electricity boards etc. The market is known as gilt-edged because these securities are of best quality and do not suffer from risk of default. Also, these are highly liquid. The Reserve Bank of India (RBI) manages the entire public debt of the central and state governments and keeps the market informed through recognized brokers about buying and selling price, keeping on ready sale securities of various maturities.

The **Development Financial Institutions** (DFIs) have lost much of their sheen due to the merger of IDBI with IDBI-bank, and that of ICICI with ICICI-bank. However, a

few DFIs are very briefly discussed below:

The **IICI (Industrial Finance Corporation of India)** was established in 1948 for providing medium and long-term credit to industry. It assists industries engaged in manufacturing, mining, construction, shipping and in generation and distribution of electricity. It also provides financial assistance to leasing and hire purchase concerns in corporate and co-operative sectors.

The **IIBI (Industrial Investment Bank of India)**, initially known as Industrial Reconstruction Corporation of India (IRCI), and then Industrial Reconstruction Bank of India (IRBI), was set up to rehabilitate sick industrial units by tackling their technical, financial and administrative problems, and also providing a solution to labour management problems.

The **SFCs (State Financial Corporations)** are state level agencies for small and medium sized industries. The first SFC was set up in Punjab in 1953. The SFCs provide loans and advances upto 20 years. They also provide underwriting facilities and seed capital assistance.

Commercial banks are important constituents of the Indian capital market, but their operations have so far been confined to the purchase and sale of government securities. Their holding of industrial securities viz; shares and debentures are very small. In recent years, banks have been increasing their participation in term lending through subscribing to the shares and debentures of specialized financial institutions. They are also setting up financial subsidiaries to provide services as merchant banking, mutual funds, leasing companies etc. to mobilize funds from investment in industrial securities.

Merchant Banking :

A few merchant banks have been set up by private financial service companies in association with foreign banking and money market institutions and some have been set up by firms and individuals engaged in brokerage and financial advisory business.

Merchant banks in India manage and underwrite new issues, they undertake syndication of credit, they advise corporate clients on funds raising and other financial aspects. Unlike the merchant banks abroad, Indian merchant banks do not undertake banking business viz. deposit banking, lending and foreign exchange services. In India, the merchant banks are subject to the regulation of SEBI.

Leasing and Hire Purchase Companies

Leasing has proved a popular financing method for acquiring plant and machinery , specially for small and medium-sized enterprises. Their growth is due to the advantage of speed, informality and flexibility to suit individual needs. The Narasimham Committee had recognised the importance and growing role of leasing and hire purchase companies in the financial intermediation process.

Mutual Funds

Several public sector banks and financial institutions have set up mutual funds on a tax exempt basis, virtually on the same footing as UTI. They have attracted strong investor support and have shown significant progress. The government has now decided to throw the field open to the private sector and joint sector. At present, SEBI has the authority to lay guidelines and supervise and regulate the working of mutual funds. The guidelines issued by SEBI relate to advertisement and disclosure etc. The investors have to be informed about the status of their investments in equity, debentures, government securities etc.

Venture Capital Companies

There is significant scope for these in the context of emergence of technocrat entrepreneurs who have technical competence and expertise, but lack financial capital. The technocrat entrepreneurs need the support of venture capital companies. The importance of venture capital companies is to give commercial support to new ideas and the introduction of new technologies. There is a high degree of risk involved in venture capital financing. Venture capital financing is one of the more recent entrants into the Indian capital market.

Apart from these, government of India has been instrumental in setting up a series of new financial intermediaries to serve financial needs of commerce and trade in the area of venture capital, credit rating and leasing etc. We refer to :

- (i) Risk Capital and Technology Corporation (RCTC) which provides assistance in the form of risk capital and technology ventures,
- (ii) Technology Development and Information Company of India Ltd 'to sanction project finance to new technology ventures. (Now known as ICICI Venture Funds Management Co, Ltd.)
- (iii) Infrastructural Leasing and Financial Services of India Ltd. to focus on leasing of equipment and infrastructural development.
- (iv) The Credit Rating Information Service of India Limited (CRISIL) to undertake the rating of fixed deposit programme, convertible and nonconvertible bonds & debentures and credit assessment of companies.
- (v) Stock Holding Corporation of India Limited to help in the transfer of shares, debentures and other securities by replacing the present system which involves voluminous paper work.

All these institutions have been set up after the mid-eighties and are of special importance for the Indian capital market.

Stock Exchange in India

For the existence of the capitalist system of economy and for the smooth functioning of the corporate form of organisation, the stock exchange is an essential institution.

The first organised stock exchange in India was started in Bombay when the Native Stock Brokers Association - now known as Bombay Stock Exchange - was formed by the brokers in Bombay. In 1894, the Ahmedabad Stock Exchange was started to facilitate dealings in the shares of textile mills there.

The Calcutta Stock Exchange was started in 1908 to provide the market for shares of plantation and Jute mills. The number of stock exchanges rose from 7 in 1939 to 21 in 1945, under the Securities Contract (Regulation) Act 1956, the Government of India has so far recognised 15 stock exchanges. Bombay is the premier exchange in the country and nearly 70% of all transactions in the country are done in that exchange.

Securities and Exchange Board of India (SEBI)

To overcome the shortcomings and drawbacks in Indian capital market, particularly the defects of stock exchanges like weak managements and to regulate the capital market, the Government of India repealed Capital Issue Act 1947, abolished the office of the Controller of Capital Issues (CCI) and set up SEBI in 1988.

Initially, SEBI was set up as non-statutory body. In January, 1992 it was made a statutory body. SEBI was authorised to regulate all merchant banks on issue activity, lay guidelines and supervise and regulate the working of mutual funds and oversee working of stock exchange in India. In 1995, SEBI was given more powers for the development of the capital market. It was empowered to file complaints in courts and to notify its regulations without prior approval of government. It was also empowered to impose monetary penalties on capital market intermediaries and participants on violations. SEBI has the power to summon attendance of and call for documents from all categories of market intermediaries. SEBI had made efforts to introduce practices and greater transparency in the capital market in the interest of investing public and the healthy development of the capital market.

CAPITAL MARKET REFORMS

(A) Primary Market Reforms : Recently the following primary market reforms were introduced :

1. Companies issuing capital in the primary market are now required to disclose all material facts and specific risk factors with their projects. SEBI has also introduced a code of advertisement for public issues for ensuring fair and truthful disclosures.
2. To reduce the cost of issue, SEBI has made underwriting of issue optional, subject to the condition that if an issue was not underwritten and was not able to collect 90% of the amount offered to the public, the entire amount collected is to be refunded to the investors.

3. Merchant banking has been statutorily brought under the regulatory framework of SEBI. The merchant bankers have now a greater degree of accountability in the offer document and issue process.
4. SEBI has advised stock exchanges to amend the listing agreement to ensure that a listing company furnished annual statement to the stock exchanges showing the variations between financial projections and projected utilization of funds in offer documents and the actual utilization. This would enable shareholders to make comparisons between promises and performance.
5. The government has now permitted the setting up of private mutual funds and a few have already been set up. To improve the scope of investments by mutual funds, the mutual funds are permitted to underwrite the public issues.
6. Since 1992, the GOI allowed Indian companies access to international capital markets through dollar and Euro equity shares. GDR issues are also launched for the same purpose.
7. The government of India has also liberalized investment norms of NRIs so that NRIs and overseas corporate bodies can buy shares and debentures without the permission of RBI.
8. The requirement to issue shares at a par value of Rs. 10 and Rs. 100 has been withdrawn. But shares cannot be issued in the decimal of a rupee.
9. The Government has allowed Foreign Institutional Investors (FII), pension funds, mutual funds, investment trusts, assets or portfolio management companies etc. to invest in the Indian capital market provided they are registered with SEBI.

B. Secondary Market Reforms: Recently, the following secondary market reforms were introduced in Indian Capital Market.

1. Three new stock exchanges at the national level were set up in the 1990s. These are Over the Counter Exchange of India (1992), National Stock Exchange of India (1994) and Inter-Connected Stock Exchange of India (1999).
2. The process of dematerialisation of securities through the depository system and their transfer through electronic book entry is pursued vigorously. For this, the National Securities Depository Ltd (NSDL) was set up in 1996, and the Central Securities Depository Ltd. (CSDL).
3. Issuing companies are required to make continuing disclosures under the listing agreement. All listed companies are required to furnish to stock exchanges and also publish unaudited financial results on a quarterly basis. Disclosure of material information is to be made available to public also.
4. Stock exchange have undergone major structural reforms. Boards of stock exchange have been more broad-based. Stock exchanges, brokers and sub-brokers have been brought under the regulatory purview of SEBI.

5. With a view to investigate frauds in the stock market, using a multi- disciplinary team of experts, it has been decided to set up a Serious Fraud office (SFO) in the Department of Company Affairs.

The government is arming SEBI with all necessary powers to control and regulate the securities market on the one side and effectively protect the interest of the shareholders on the other. To resolve the conflicts, of interest in the governance of various stock exchanges, new governance mechanisms with a separation between, ownership, management and trading rights has been evolved.

LESSON NO. 1.4

**THE QUANTITY THEORY OF MONEY:
FISHER'S AND CAMBRIDGE EQUATION****Meaning**

Value of commodity is defined as units of other commodity (or commodities) that can be exchanged with it or purchased with it. It is, therefore, the purchasing power of one commodity in terms of other commodities. Depending upon the conditions of market (that is, demand and supply) any particular commodity can be exchanged only with a very limited number of goods. It is not very realistic to assume that books can always and at all places be exchanged for cows, bicycles, wheat, fruit, cinema shows and so on. Thus, when goods exchange for goods, it is with a limited range that the actual process may take place.

Value of money can be defined, in a similar fashion, as units of other commodities that can be purchased with it. But money can buy any economic goods. In fact, sometimes money itself is defined as a medium of exchange. Money can, therefore, be exchanged for any commodity. The range is very wide; in fact, the whole market that is anything which is available in the market. We have heard people saying, not unrealistically, that money can buy anything. Therefore, value of money is its general purchasing power, what it can buy in the market or what can be exchanged for it.

Let us now take the other side of the picture. Price of a commodity is defined as value of commodity in terms of money. It means the number of units of money that can be exchanged for a unit of one commodity. A price of a commodity is its value of money and value of money is the units of commodity (or commodities) that are exchanged for one unit of money. It can immediately be seen that value of money is just the other side of the price of the commodities. Since money can be exchanged for all commodities, value of money is the other name of the general price level. When we say that the value of money has gone down it means money now buys less number of units of the commodity (or commodities) than before. It also means that a unit of a commodity must now be exchanged for more money than before. If more money has to be paid for the same unit of commodity we say that its price has risen. Thus, a fall in the value of money means a rise in the general price level and vice-versa. Value of money can briefly be stated to be its general purchasing power. A rising price level means low purchasing power of money and a falling price level is another name for its rising purchasing power.

Determination of the value of money

As money is one of the very old economic phenomena and value of money intimately affects our daily routine of life, the determination of the value of money has been a very interesting subject of enquiry in the history of economic thought.

Early writers started to explain the general level of commodity prices and quite naturally came up to the influence of supply of money on it. This approach of explaining the value of money (or the general price level) through its supply is called the quantity theory of money. A modified version of the same theory by a few Cambridge economists later is labelled as the cash balance approach or simply as the Cambridge Equation for determination of the value of money.

We shall now deal with the quantity theory of money and supplement it with the cash balance approach. A recent reformulation of the quantity theory by Milton Friedman and others shall be taken up later, after we have studied the approach.

Quantity Theory of Money--Fisher's Approach

Quantity of money got formally related to the general price level at the hands of a noted French writer Jean Bodin. The Spaniards had brought a lot of gold and silver into the European market from their colonial exploits in South America in the sixteenth century. This unleashed a sort of revolutionary rise in the European price level as explained by Bodin. Bodin's formal statements of a definite positive co-relation between money and price level (in the modern language as we say now) were later worked out as an equation of exchange and given the status of a formal theory. Professor Irving Fisher did this task brilliantly in early 20th century and now the quantity theory of money is attached to his name. As Fisher explained the theory through an income velocity concept, it is usual to refer to this theory as an income velocity approach. It is also named as the transactions approach because the underlying assumption of the analysis is that money is needed for effecting economic transactions only (by which is meant the sale and purchase of goods and services).

It is best to use the formulation of Irving Fisher in explaining the two popular versions of the quantity theory. We may start from the simplest form of any transaction. One of the parties sells goods and the other party pays cash. Amount of money spent on the purchase of the goods must be equal to the value of the goods. This is true for all transactions in the economy. Sale and purchase are two aspects of the same transaction. We can, therefore, take an aggregate view of the goods and services purchased by people which is equal to the total quantity of money paid by them to the sellers. It, of course, assumes a closed economy so that nothing is purchased by money which is not at the same time sold by someone else.

Now the total value of all purchases made with money can be taken as being equal to the average stock of money multiplied by the average number of times that money stock was spent for goods and services. In Fisher's symbols, M stands for money and V its velocity or turnover rate of money stock, that is, number of times that stock of money is used for buying goods and services. MV represents of course the demand for money. In a similar fashion, the sale side of the transaction in the economy can be put in symbols. Sale side is physical quantity multiplied by its price and the sum of all these sales shall be equal to MV — the demand side or purchase side. The sale side

can be put in the form of $\sum_{i=1}^N p_i q_i$ where p and q are price and quantity in any transaction and N represents the total number of transactions. Now the sum of all prices i.e., $\sum_{i=1}^N p_i$ can be represented by a price index P . And the sum of all goods and services sold in the market (meaning total of all transactions) can be symbolised as T . Supply side of all transactions is, therefore, equal to PT which is the amount of money received by the sellers or simply the value of goods and services sold by the sellers.

It is obvious that MV is always and necessarily equal to PT . Money paid is equal to money received. Value of all transactions must be equal to the average stock of money multiplied by the money's turnover against all goods and services. Hence $MV=PT$. This is an identity true of all closed economies for the symbols M, V, P and T as defined above. This identity $MV=PT$ is sometimes called the equation of exchange. If by M we mean only the currency in circulation, then M^1 equal to credit money must be added to have the total money used for purchasing the transactions. M has its own velocity, i.e., V . Thus, the left hand side of the equation becomes $MV+M^1V=PT$. It is convenient to restrict the identity to $MV=PT$ and define M as broad based money that includes credit money as well as cash. But the more usual way is to assume that the supply of money depends upon the monetary base (i.e., deposit money itself depends upon the currency held by banks and the public). We shall, therefore, take the popular form $MV=PT$ for our analysis.

In a relationship like $MV=PT$ the identity is true by definition. It has analytical significance only when the identity is changed into a functional relationship in the behavioural sense. This is also done by Fisher and this is his real contribution to economic analysis.

Fisher and other quantity theorists hold that since M, V , and T are the variables that effect P or price level (or the value of money) and since V and T are constant, therefore, P depends directly on M . The theorists go one step further and say that proportionate changes in M bring about proportionate changes in P .

Rationale of taking T and V as constant :

Total Transactions (T)

It is generally interpreted to mean all transactions in the economy or the total volume of trade for which money is needed. Thus, it includes goods, services as also financial assets and claims. But the major component of T is the total volume of commodities which depends upon the level of output plus the net changes in inventories (inventories are the stock of goods carried forward from the previous period as also the stock to be carried forward to the next period). Inventories, however, form a very small part of the total output and their proportion to total output does not vary much ordinarily. Hence T may be taken to behave as the volume of currency output. Now the volume of current real output depends on the size of labour force which, in turn,

depends upon the size of the population. Capital stock depends on thriftness of the society. Techniques of production of current technology determine the productiveness of the factors of production (labour, capital and given land resources). Thus, the volume of output is maximum at the level of full employment given the technology.

Volume of trade or T (which is being taken as the current real output) also depends upon the degree of specialization in the field of the production (more specialization means more transactions) and degree of integration between production and business or commerce (more integration means less transactions). Barter trade also reduces the number of transactions done through money. These institutional factors change very slowly. Therefore, they are taken as constant and their impact on changes in T may be ignored. Thus, current real output may be taken as a proxy for T.

There is a version of the quantity theory in which aggregate sale side of the transaction in the economy ($\sum_{i=1}^N P_i Q_i$) taking q or quantity to mean only the new goods

and services sold (i.e., net addition to output in the sense of GNP accounts). The price index P is suitably revised to mean prices relating to those goods only which enter into GNP. It is better to use the symbol Y instead of T in such a case. Hence the Fisherian equation becomes $MV_y = P_y y$.

Here V, the velocity or money turnover also refers to new goods and services. In this formulation, it is easier to assume directly to fixed full employment level as constant.

Velocity or the turnover money(V)

The velocity is the quickness with which money changes hands in financing different transactions as a medium of exchange. Velocity shall be very high if everyone uses the money to finance the transactions as soon as one receives. It shall be low if people take time in finalizing the transactions and hold money until they finally make use of it. Postponing purchases and sales while keeping money in hand also reduces the velocity; velocity is measured as the average number of times a unit of money changes hands during a given period and is calculated by dividing total money payments by the average stock of money. On what does velocity depends? Fisher divides the influencing factors into long-run determinants and the short-run determinants. The long-run factors are (i) habits of the individual (ii) system of payment in a community and , (iii) general causes like density of population and rapidity of transportation. The habits are related to thrift and hoarding, use of credit and the use of cheques. More of hoardings reduce the use of money, hence lower its velocity as well. But a developing credit system speeds up the velocity of circulation of money by making money payment with certainty (and, thus, lowering average money hoardings). System of payments affect velocity through the frequency of receipts

and disbursement, the regularity and the degree to which receipts and disbursements are synchronised. More frequent receipt of income or of distribution of payments speeds up the velocity. Regularity or irregularity relates to certainty of payment. Certainty, of course, reduces the average cash holdings. Synchronization, if it is perfect, means an individual receives in a day what he spends exactly in that day. Cash holdings are not necessary and we have infinite velocity. Extent of the non-synchronization shall have a bearing on the determination of velocity.

These long-run factors are institutionally given and these institutions (habits and system of payment) can be taken as constant in the short-run. The general causes also depend on the mobility of population and technological development in the field of communication. They do not change in short-run.

Fisher also talked of short-run factors influencing velocity such as rate of interest, expectations of changes in price level and general confidence (or the lack of it) in future events. For example, at higher rates of interest people use and hold less cash and put the money in interest-bearing financial assets. Velocity shall fall. (However, Patinkin believes that Fisher did not take rate of interest as a serious determinant). The short-run factors do change the velocity and the modern economists emphasize them very much. But Fisher discussed and considered seriously only the long-run factors and concluded that velocity can be taken as a constant in the short-run.

Impact of Money on Price Level

The identity $MV=PT$ behaves like an equation when we assume that V and T are constant. In that case, changes in P can be explained only by changes in M . Subsequent writers, and Fisher himself at some places in his book, *The Purchasing Power of Money*, made it clear that V and T have, therefore, no influence on P (they are absolutely constant) so that entire changes in P are explained by changes in M only. It also meant that changes in P result only from the changes in M . The next step is quite obvious to assert that a proportionate change in M effects an exactly proportionate change in P . Thus, the value of money depends only on its own quantity. Double the quantity of money in an economy and you have doubled the price level.

"Since a doubling in the quantity of money will not appreciably affect either the velocity of circulation of money or of deposits or the volume of trade, it follows necessarily and mathematically that the level of price must double". This is, of course, a very crude application of his own analysis of the factors influencing the relationship $MV=PT$. But Fisher made it into an acceptable principle.

"We may now restate, then in what casual sense the quantity theory is true. It is true in the sense that one of the normal effects of an increase in the quantity of money is an exactly proportional increase in the general level of price".

$$\text{i.e. } \frac{\Delta M}{M} = \frac{\Delta P}{P}$$

So that the general level of prices changes in exact proportion to any change in the stock of money.

It is necessary to remember that rigid proportional effect on P occurs through changes in M only on the assumption that M, V and Y (or T) are independent of each other. That means V and Y (or T) are not affected by changes in M. Thus, the full employment level of GNP is determined by non-monetary factors like quantities of the factors of production and their productivities. The level of output is determined by the 'real' factors and not monetary factors. In Pigou's famous phrase, money is simply a 'veil'.

Appraisal

Put in its original form P is the price level of cash transactions —in fact, some sort of average of the price of all sorts of goods (consumer goods, durables, capital goods, raw-materials and semi-finished goods), services and financial assets. Purchasing power of money is more immediately concerned with the prices of consumer goods. Even for national income deflators, the theory can't be used because T is not the aggregate of final goods. Prof. Chandler solves this problem conceptually only when he suggests breaking up of PT into different sub-groups of $p_1t_1 + p_2t_2 + p_3t_3 = \dots = p_n t_n$. But we can't do it effectively unless we are able to establish a definite relationship of M or V to each different P separately. One way out is as we explained above in the form of one version of the quantity theory that $MV = PY$. As a theory of value of money this is a better approach, but its practical explanation for all prices gets limited.

The theory makes price level a pure monetary phenomenon. Thus, increase in money wages and salaries of employees raising the bank rates or all rates of interest or rising of rents will not result in any influence on the general level of the prices of goods. This goes against the common experience that increase in costs in one sector result in raising the general price level. Quantity theorists, however, assert that such changes unaccompanied by an increase in M, shall not exert any influence on P and that in most cases rise in the costs is due to a recent increase in the M itself.

There is a certain dichotomy in the explanation of prices of goods through their own demand and supply (real factors out of aggregate transactions in terms of the supply of money only). Why does aggregate demand and aggregate supply not determine the aggregate price level? Don Patinkin in his recent reformulation of the quantity theory has tried to remove this defect in the old theory.

The major criticism against the theory flows from the assumed constant values of V and T (or Y) and independence of the influence of M on V and T. These two aspects can be stated separately. First implies that short-term and long-term factors influencing V make it stable. Fisher himself could not forcefully assert that short-term factors like expectations do not influence and change the value of V. The long-run factors in a stable full employment non-growing economy may make V

institutionally given, but a rapidly growing economy is usually accompanied by the rapid changes in economic structure, institutions and fundamental change over a short period, may be in response to fundamental changes in economic relationships. The second aspect of this assumption that money is just a veil and is wanted for the sake of transactions alone is falsified by the powerful analysis of Keynes into the motives and motivations of holding liquidity in the form of cash money. Money is not a veil, but a part of the body economic.

In spite of the above criticism, quantity theory of money in its simple approach is lauded by many economists. Schumpeter considered Fisher as America's foremost analytical economist for his insight into the theory of purchasing power of money. Quantity theory lived first, (even when Fisherian formula was rejected) in the form of Cambridge equation and has recently been rehabilitated by Milton Friedman and Don Patinkin in their separate revised formulations.

We, therefore, turn to the Cambridge Equation or Cash balance approach to the quantity theory of money.

Cash Balance Approach or Cambridge Version

Cash balance approach to the quantity theory has been worked out as an alternative and a better explanation of the mechanism and determination of the value of money. With slight variations in working out the details, the theory has had illustrious names of Alfred Marshall, A.C. Pigou, Frederick Lavington, Denis Robertson and J.M. Keynes as its originators and protagonists. As these names are connected with the Cambridge University, the theory expressed in the form of behaviouristic equation is labelled as Cambridge equation or Cambridge version of the quantity theory. In analysing the demand for money the theory emphasizes the demand to hold money as cash balances. Hence its title as the cash balance approach.

This theory applies the usual demand and supply apparatus to determine the value of money in the celebrated neo-classical fashion. Keynes, himself a student of Marshall, noted that Marshall taught "the quantity theory of money as a part of the general theory of value."

The Cambridge economists define and take the supply of money in the Fisherian way of currency plus the deposit money with the banks. Nothing new is added. The uniqueness of the Cambridge approach is the application of general demand analysis to the special case of money: what is its utility and what is its opportunity cost and under what budget constraint must it be demanded?

The classical explanation of demand of money as a medium of exchange is accepted. But something else is added. Money is also demanded as security against uncertain future like unforeseen contingencies involving expenditure against irregular and uncertain future income. Thus, the present income and resources are not entirely spent on current obligations. Some cash is simply held for a future use. Utility of money is, therefore, both as medium of exchange and as a security against

future. Urgency of these needs decide this psychological yield on money. Marginal yield shall, of course be lower, the larger is the quantity of money held.

The amount of cash held (given the desire to hold it emanating from its utility) depends upon the available resources and opportunity cost of their use. There is a difference of opinion among the Cambridge economists as to what constitutes the resources which act as budget constraint. Marshall takes both income and wealth (property) as the source out of which a proportion is demanded as money. He takes a concrete illustration of an economy whose income is 5 million quarters of wheat and whose property is 15 million quarters of wheat. If the money is kept as one tenth of income and one fifth part of wealth as ready purchasing power then the aggregate value of currency of the country shall be one million quarters of wheat. Prof. Patinkin believes that in his later writing Marshall was unclear as to the distinction between income and wealth for the purpose of budget constraint. Other Cambridge economists are also not of one opinion on this matter. Keynes in his "Tract on Monetary Reform" tells us that the people's desired amount of purchasing power depends, partly, on their habits. In the same writing he approvingly quotes Marshall where both wealth and income are taken as resources. Keynes in his " *A Treatise on Money*" criticised Pigou's interpretation of wealth as resources and said it were rather current income. We may say that Cambridge economists are not united on the definition of resources (or the budget constraint) for the demand for money, but generally they take income and wealth as the resources.

Given the utility and the budget constraint the demand for money depends on its opportunity cost (in relation to the utility). There are certain differences in details, but the Cambridge economists believe the cost of money to be held is (i) the rate of interest foregone on possible financial investment (ii) the yield on real capital which could have been earned if money were instead invested and (iii) the expected rate of inflation which shall decide the inducement to hold cash or commodities depending upon whether prices are expected to fall or rise in the future. Other factors have also been mentioned as influencing demand for money, like habits, system of payments, and so on. These are institutional factors already been dwelt upon by Fisher.

Thus the demand for money depends on seven broad factors :

- (i) Income (money income), say, P_y
- (ii) Wealth, say, W
- (iii) Nominal rate of interest, say, i
- (iv) Yield on real capital, say, r_k
- (v) Yield on commodities say, r_c
- (vi) Utility of money, say, U
- (vii) Institutional factors, say, X

We may, therefore, write the generalised demand function for money or M as

$$M_L = f(W, P_y, i, r_k, r_c, U, X)$$

The Cambridge Equation:

Prof.A.C.Pigou tried to put the demand for money ideas into the form of an equation. It can then be used to predict the price level or the value of money. It can be compared to Fisherian equation as well.

Prof. Pigou has taken three main factors as influencing demand, namely R the resources, r_k and r_c as we stated above.

$$\text{Thus, } M = f(R, r_k, r_c)$$

Then he states that r_k and r_c are constant (in fact it means the expected yield on capital and the expected rate of inflation-hence expectations are held constant). This means r_k and r_c give a constant proportion of R which is termed as k. Assuming that no economies are involved if more money balances are held, the equation or a specific form of the above function is obtained as $Md = kR$

Now in order to compare his ideas with Fisher he assumed that R(the resources) had some relationship to Fisher's T or Py.

$$\text{Thus, } Md = k(Py) \text{ or } Md = kT$$

It must be remembered that any change in r_k and r_c shall change Md. But from the above equation k is easily seen as a fraction or proportion of money income Py (or say T or say k) which people desire to hold as cash balances.

The analytical implication should be made clear now. In an equilibrium situation demand for money (Md) and money supply (Ms) must be equal. If from an initial equilibrium position ($m_s = L(Py)$) money supply is increased, then either k or P must increase. This means either people change their desire and begin to hold more money as cash balances (i.e., they change their expectations of r_k & r_c that way) or prices must increase. With given constant k, an increase in Ms must result in the increase in the price level. Thus, as a price level theory we may put the equation formally as $M = k Py$.

More generally price level (or the value of money) depends upon the level of real output, the stock of money and the fraction of money income held in money form.

Comparison of Fisherian Approach and the Cambridge Approach.

If we put the Cambridge approach in the form of Pigou's equation at $Md = k(Py)$ then it can be easily shown that k is simply a reciprocal of Fisherian velocity and that Fisher's equation has been given only a different nomenclature. We may show it thus:
Fisher equation :

$$MV = Py$$

$$\frac{M}{Py} = \frac{1}{V} \quad \text{or}$$

$$\begin{array}{l} \text{Cambridge equation} \\ \text{or} \end{array} \quad M = \frac{1}{V} Py \quad \text{or} \quad M = kP_y$$

$$\text{or} \quad \frac{M}{P_y} = k$$

As M and P_y are defined similarly in both cases, therefore, $k=1/V$.

The implication is that the forces that explain k are the very forces that explained V .

But there are some very important differences between the Fisherian and Cambridge approach as far as analysis of the economy and human behaviour are concerned. First, behind the connotation of the definition of money under Fisher is the task of money as purely a medium of exchange. But under Cambridge equation form, money connotes the important function of store of value too. Money includes many assets and is a much wider concept.

Second, outlook is different in the two cases. Fisher takes money to be held as a flow of money expenditure. For Cambridge economists, money is held as a stock of wealth. Analysis of a real situation., accordingly, shall be quite different. Third, about V and k although we can show the mathematical equality or similarity of Cambridge and Fisherian equations, yet in a behavioural sense they are not quite the same. Quantity approach taking velocity as how fast money is spent, goes to enquire into the institutions and methods of payment that determine the speed. Cambridge people taking $1/k$ as a proportion of purchasing power or wealth held as ready cash goes to determine the economic motives and behaviour pattern that influence the value of k . Fourth, Fisher and Cambridge economists differ on the emphasis of M_s changing P because the latter does not make k completely independent of real income as does Fisher. Non-monetary assets and the yield on them effect the value of k and as M_s changes, the influence on these may be different. Hence exact proportional change in P due to change in M_s is not guaranteed.

Thus, analytically the two approaches are not the same and they represent two separate theories of the value of money. One concentrates on the supply side of money and the other is developed as the theory of demand for money. But both are inadequate when they make P dependent on M_s only whether in exact proportion or not.

Books Recommended

1. Dudley G. Lockett : Money and Banking
2. Gupta, R.D. : Keynes and Post-Keynesian Economics

LESSON NO. 1.5

BANKING - DEFINITION AND CREDIT CREATION**WHAT IS A BANK:**

Banking as an independent business originated during the 14th century in England. The business of banking in those days was conducted mainly by a class of people called "Jews" of Lombardy. These people viz. the Jews became popular in the course of time as 'Lambards' since they conducted their business in the Lombard street of England. The term bank is supposed to be derived from the Greek word 'Bancun' or 'Bancherium', both of which mean 'table' or 'bench'. The money lenders, who transacted their business on the benches in the market place, displayed their coins across benches and when a banker was unable to meet his obligations, his Bancun was broken to pieces. According to J.W. Gilbert, the term bank is synonymous to the Italian word "monte", meaning a mound or heap. Banking is, accordingly, a business which requires a heap of money. The Concise Oxford Dictionary defines a commercial bank as "an establishment for custody of money which it pays out on customer's order." This definition, though short and simple, is not fully comprehensive as it emphasizes only one aspect of banking namely, the acceptance of money for safe custody and transfer under orders from the customer. It ignores many other important functions which modern banks perform. Since a modern bank performs a number of functions, different economists have defined the term differently.

Professor R..S. Sayers in his book "Modern Banking" opines that: Banks are institutions- whose debts - usually referred to as "bank deposits" - are commonly accepted in the final settlement of the peoples' "debts", According to Geoffrey Crowther, a banker is to take the debts of other people, to offer his own in exchange, and thereby to "create" money. He may be a dealer in debts, but indebtedness is an obverse of wealth, and it would be equally permissible to describe the banker as a liquifier of wealth". Professor L. Hart in his book, "Law of Banking" defines the banker as "one who, in the ordinary course of business, honours cheques drawn upon the person from whom he receives money on current account." In his book "Money & Banking", Prof. Raymond P. Kent defines the bank" "as an organisation whose principal operations are concerned with accumulation of the temporarily idle money of the general public for the purpose of advancing it to others for expenditure."

Crowther observes "the present day banker has three ancestors - merchant, money-lender and goldsmith. A modern bank is something of each or these. It is said money has two properties. It is flat so that it can be piled up, and it is round, so that it can circulate. The progeny of the money-lender is concerned with flat money, piled up money i.e., savings.

The progeny of the goldsmith is concerned with round money, circulating money i.e. cash."

After all is said and done, just as it has been chosen to define 'money is what money does', so too perhaps the best definition of a bank, or banking company or a banker is by way of reference to the functions it or he performs.

In this context, it would be best to use the definition put forward by Banking Companies Act, 1949 (now termed as Banking Regulation Act, since 1965) which defines 'banking' and 'banking company' in Section 5(b) as:

Banking means the accepting, for the purpose of lending or investment of deposits of money from the public, repayable on demand or otherwise, and withdrawable by cheques, draft order or otherwise.

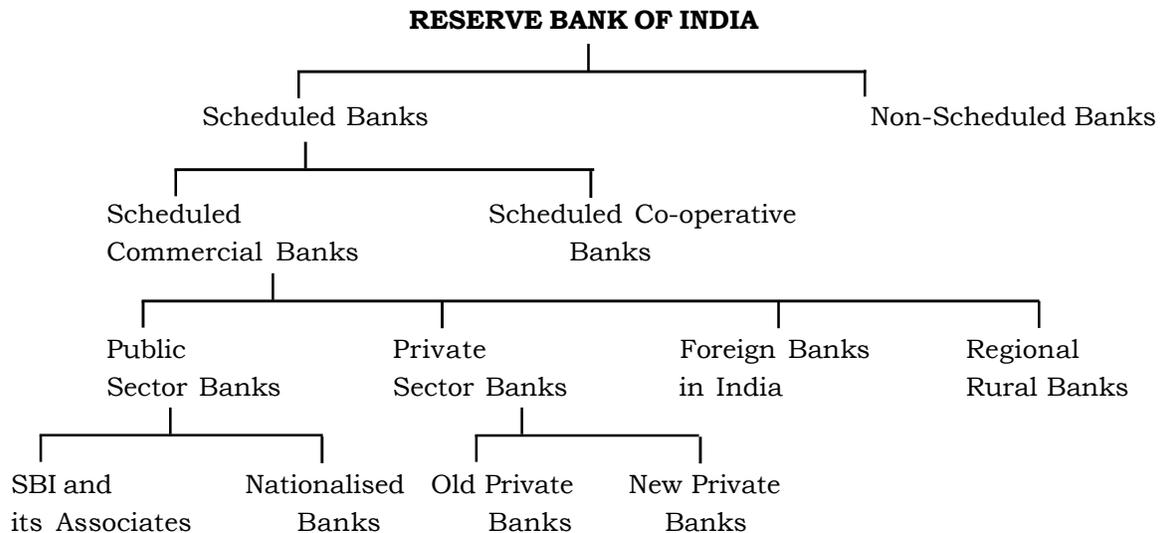
It is important to note some points in this definition. These are –

- (i) A bank will accept deposits of money, not goods or non-money financial assets.
- (ii) The acceptance of deposits by companies for the purpose of financing their own business is not regarded as banking.
- (iii) A foreign company incorporated outside India and having a place of business within India will be a banking company, if it performs the functions of banking.
- (iv) The deposits are to be accepted from the public at large, not merely from shareholders.
- (v) The deposits are repayable/withdrawable.

Classification/Structure of Commercial Banks

Although banking system in India is organised as well as unorganized, we shall be focusing only on the organised system, i.e., we will not be including the indigenous banks and other private lenders in the structure of commercial banks here (though we study about them later in lesson no. 11).

The organised banking system in India can be broadly divided into the Reserve Bank of India (which is the central bank of the country), the commercial banks and the co-operative banks. Once again, we will leave out the co-operative banks and concentrate only on commercial banks (as per the title of our lesson). The classification or structure of commercial banks can best be understood with the help of a chart :



Source : Adapted from R.Datt and KPM Sundharam, Indian Economy (2007 edition) page 839.

Under the RBI Act, 1934, banks are classified as scheduled banks and non-scheduled banks.

The scheduled banks are those which are entered in the second schedule of RBI Act, 1934. These banks had to fulfill the following conditions to be classified as scheduled banks –

- (i) The banker concerned must be in the business of banking in India.
- (ii) It must have paid up capital and reserves of value not less than Rs. 5 lakhs.
- (iii) It must satisfy the RBI that its affairs are not conducted in a manner detrimental to the interests of its depositors.

These banks come under the purview of various credit control measures of RBI. They have to maintain a minimum balance with the RBI. They are entitled to borrowing and rediscounting facilities of RBI.

The non-scheduled banks are not entitled to facilities from RBI except in abnormal conditions.

After 1969, commercial banks were broadly divided into nationalized/public sector banks and private sector banks. The State Bank of India and its seven associate banks, along with 19 other banks are public sector banks. The private sector banks include the old as well as new banks (which came up mainly after 1991). Foreign banks in India are those banks which have their headquarters in other countries, but do banking business in India either by setting up branches or through subsidiaries.

The main difference between State Bank of India (SBI) and nationalized banks is that while ownership of nationalized banks vests in the Govt. of India, SBI is largely owned by RBI. The associate banks are owned by SBI.

ECONOMIC FUNCTIONS OF COMMERCIAL BANKS

There are many kinds of banks: commercial banks, saving banks, industrial banks, agricultural banks, co-operative banks, exchange banks, central banks etc. But when we use the term bank without any prefix or qualification, it refers to commercial bank. The term commercial bank is a holdover from an earlier period when banks were predominantly short-term financiers of lenders and merchants for goods in transit & inventories. Now when their lendings are no longer confined to short-term "commercial" loans only, their name is not accurately descriptive of their nature and functions. It may rather be misleading. Today these so-called commercial banks have diversified their activities to a point where these may be referred to as "Department Stores of Finance". They perform not just one but many types of functions, some of which are duplicated by other financial institutions. The functions and services rendered by banks can be broadly classified under two heads:

- (a) Banking functions; and
- (b) Subsidiary Services

Under the former come such functions as the attraction of deposits, advancing of loans etc. Banks usually lend what is lent to them. Sometimes it so happens that they lend more than what is lent to them. Under such circumstances, banks are said to "create credit." Creation of credit is another cardinal function which banks perform. They also undertake the transfer of funds from one account to another under written instances from their clients. So the modern banks are more concerned with the receipt, creation and transfer of deposits in addition to other miscellaneous services which they render to the industrial, trading and business communities.

Let us take each function and discuss it in some detail :

(a) Banking Functions :

1. Acceptance of Deposits or Bank as Borrower i.e., as collector and custodian of public savings: Banks attract deposits by mobilizing the savings of the community. The bank, to throw its net as wide as possible in order to have a rich game, has to maintain a variety of accounts that suits the needs and tastes of a large body of depositors. Generally speaking, deposits are of three types: fixed deposits, current deposits & saving bank deposits. Fixed deposits are those deposits which are withdrawable only after a specific period. The bank allows a depositor to borrow funds against his fixed deposit as security. The longer the period of deposit, the more attractive the rate of interest.

Fixed deposits are also known as time liability of the bank. Deposits accepted on current account, on the other hand, are withdrawable any time by the depositor by means of cheques. These are demand liabilities of the bank. As a rule the banks do not pay any interest on these deposits. Saving bank deposits are subject to certain restrictions on the amount so receivable or withdrawable. These deposits carry a lower rate of interest. A bank collects its funds mainly through its deposits. It pools the scattered savings of the community and, thus, serves as the reservoir of the community's savings.

Thus, from the point of view of banking policy, deposits fall into two categories (i) Demand Deposits i.e., deposits repayable on demand. These include current deposits and saving deposits and (ii) Time Deposits: These have fixed maturity period and include fixed deposits, recurring deposits, deposits accepted under various schemes etc.

Banks owe the deposit amount to the depositing public. Deposits are bank's liabilities. To an extent these liabilities are demand liabilities, provision has to be made by banks to keep liquid assets with them to meet these liabilities on demand. Larger the proportion of demand liabilities, higher would be the ratio of liquid assets. Liquid assets, however, give a low return and hence bank's efforts would be to have maximum time deposits.

2. Grant of credit to all sectors of the economy or banks as lender i.e., a dispenser of resources to the needy : Money accumulated by the banks by accepting the deposits from the public is utilised for making advances to those who require it for productive purposes. The profit earning capacity of the bank mainly depends upon the performance of this function. This function is also important in the context of the economic development in general and the development of trade, industry and commerce in particular. Banks grants credit in the form of advances as cash credits and overdrafts and loans. While making advances, generally, no cash is given to the borrower. An account is opened in the name of the borrower and he is authorised to withdraw money through cheques until the amount of the loan agreed to by the bank gets exhausted.

(i) Cash Credit : Cash credit is a type of advance wherein a banker permits its customer to borrow money upto a particular limit by bond of credit with one or more sureties. The advantage associated with this system is that a customer can withdraw money as and when required. The bank will charge interest only on the amount withdrawn by the customer. He is also free to repay into the account as frequently as he likes. Most industrial houses and business firms borrow money in this form. In the recent years, banks have started charging a minimum interest of around one percent for the amount of account not used. However, the bank has no effective control on the end use of credit. This type of advance favours big and established borrowers.

(ii) Overdrafts : This facility is granted by the bank only to those persons who have their current accounts in the bank. To meet the temporary needs of the customers

the bank may permit the customer to overdraw his current account. The interest is charged only on the actual amount used. The difference between cash credit and overdraft is that an overdraft is not granted regularly, whereas the cash credit is sanctioned regularly to the business houses to meet their working capital needs. Secondly, to get the overdraft facility, a customer should be an account-holder of the bank; while cash credit requires no previous account in the bank. Also, for overdrafts the security is financial assets, while for cash credit it is mainly physical assets.

(iii) Loans : Loans are lump-sum advances made by banks to the customers. Interest is charged on the entire amount sanctioned irrespective of whether the complete amount is withdrawn or not by the customer. Loans are of various types. These may be term loans, participation loans, personal loans, call loans or collateral loans. Term loans are granted for a fixed period exceeding one year. They are granted to meet capital requirements of the business houses. These loans are to be repaid strictly according to the schedule of repayment. Utmost care is exercised while granting these loans. When loans are sanctioned by more than one financing agency to share the risk; we call them as the participation loans. These loans are more popular in the U.S.A. Such loans are granted only when the risk involved in lending is too high.

Personal loans are granted to the individuals to meet their personal requirements, mostly concerning their standard of living. The loans are repayable in monthly installments. Personal loans are normally sanctioned for a period not exceeding two years. These loans are popular in the U.S.A. and U.K. Call loans are usually granted to the dealers on the stock-exchange. These loans are granted only for a few days - normally one to fifteen days. The banks reserve the right to call back the payment of these loans any time. When loans are granted against certain collateral securities, such as promissory notes supported by bank, securities of pledging etc., they are called collateral loans.

Thus, a bank acts as an intermediary in mobilising savings of the people and diverting them to the producers and businessmen to drive the wheels of industry and float the vessels of commerce.

3. Discounting of Bills : Discounting of bills is, practically speaking, lending for short periods. A trader, for instance, who does not want to lock up large funds in trade credits, may draw a bill of exchange on his debtor and after it has been accepted by, or on behalf of the debtor, he may get it discounted by his bankers. This gives the trader immediate possession of money to him less (i) a deduction for the loss of interest and (ii) cost of collection by the bank. The bills are usually for three months and when they mature, the bank realises the face value of the bills from the debtor. This type of business is very common in advanced countries. In India, efforts are being made to develop a regular bill market.

4. Creation of Money i.e., Bank as a Creator of Credit : The most distinctive

deposits i.e., demand deposits serve as money in the community. Demand deposits are created in two ways. Firstly, by converting cash into a demand deposit with the bank and secondly, by borrowing from the bank and lodging the same amount with the bank as demand deposit. The latter form of deposit is most popular and provides the main channel through which banks create credit. The commercial banks create and destroy the community's money supply in the form of demand deposits through variations in their earning assets or their debt instruments. The banks advance a loan to its customer and allows him to operate his loan in return for promise to repay the same together with interest thereon at some future date. A loan of Rs. 1000 sanctioned to a customer has the effect of not only increasing the total deposits of the bank, but has enabled the banker to put thousand and more rupees into circulation. Every loan sanctioned by the banker creates a deposit. Thus, the bankers lend-not only what is lent to them, but sometimes more than what is lent to them. A section in this lesson will be wholly devoted to explaining the mechanism of credit creation. It is sufficient to say at this stage that banks are generally responsible for most of the fluctuations in the money supply in the country.

5. Clearing Cheques: The depositor has the right to withdraw his deposits with or without notice, depending on the nature of the deposits. He has also the right to ask his banker to transfer the funds into the account of someone else by means of a cheque. These cheques are frequently deposited in a bank other than the one on which they are drawn. This requires the transfer of credit, not only from one depositor to another but also from one bank to another. This process, called clearing, has become highly complicated but exceedingly efficient part of banking operations. Let us see how the process is carried on.

Whenever the payees or the receivers of bank cheques deposit in the same bank on which the cheques are drawn, it is just a case of book adjustment in the same bank. But normally, cheques are deposited in other banks. Consequently, the bank receiving the cheque deposit must collect the proceeds from the drawee bank. When it happens in the same city, the cheques are collected through local clearing house. But when they are drawn on other cities, agents located in those cities must be used to affect the collection. In such cases, the local bank carries a deposit with a city bank that agrees to act as its collecting agent. At the time of clearing, the messengers from each bank go to the clearing house and exchange the package of cheques so that each messenger comes into the possession of the cheques drawn on his bank. On a specially prepared statement sheet containing the names of all other clearing banks the total of cheques is brought to record from the clearing house. If the amount received exceeds the amount brought to the clearing house, the bank has an unfavourable balance, or is a net debtor and must pay the difference to the clearing house. In some cities, cheque clearing is formally carried out more than once a day.

6. Financing foreign trade & as a dealer in foreign exchange : Modern banks finance foreign trade. They issue and accept instruments of credit like bills etc. for discounting purposes. They often accommodate businessmen and traders for purchasing and selling of goods.

Modern commercial banks, many of whom have branches or offices or correspondent banks in other countries trade in foreign currencies also. Although the central banks may intervene in times of difficulties, banks engage in currency exchange as a normal function without intermediary. This function has increased the security of commercial bank, as the foreign exchange reserves in other overseas office swelled, and gave rise to increase in their liquidity. Banks finance multi-national corporations and other industrial houses as well as exchange house, conserve foreign currency and accept foreign remittances for conversion into local currencies. Since the central banks are the custodian of foreign exchange and are also bankers bank, "reserve" information is sent by commercial banks to the central banks periodically.

7. Financing Industries : Banks provide the necessary finance for industrial development. This function is also of great importance to a country which is planning the use of its resources. The attitude of commercial banks towards industrial finance varies from country to country. England followed a natural policy towards industrial finance, while in Germany there was a complete collaboration between banks and industrial finance. In certain other countries, industries continue to develop on account of the finance provided by the banking system.

(b) Subsidiary Functions:

The subsidiary functions of modern commercial banks can be classified under two heads :

- (i) Agency Functions and
- (ii) General Utility Services

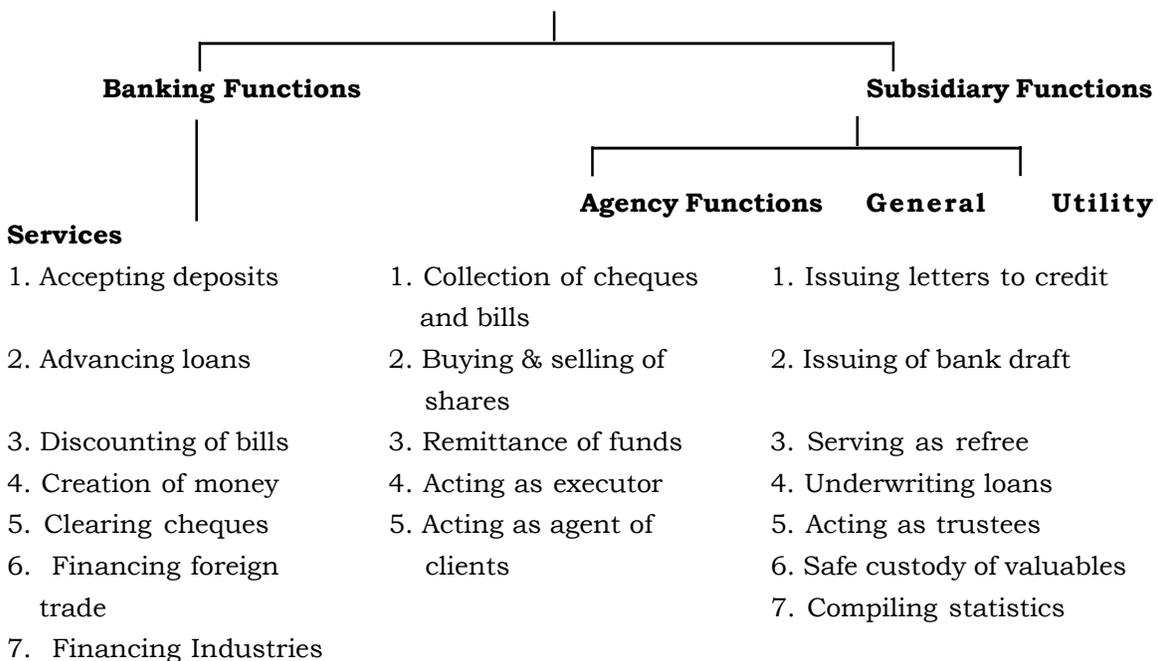
(ii) Agency Functions : A commercial bank performs certain functions as acting as an agent for and on behalf of its customers. Some of these functions relate to (a) collection and payment of cheques, bills, promissory notes and other commercial instruments, interest, dividend, subscriptions, rents or other periodical receipts and payments like insurance premium, (b) buying and selling of shares, bonds, securities etc. on behalf of the customer, (c) remitting of funds on behalf of the customers by drafts of mail or telegraphic transfer; (d) action as executor trustee and attorney for its customers, and (e) acting as correspondent agent, representative of its client etc.

(i) General Utility Services : A commercial bank performs certain general utility services such as (a) issuing of letters of credit to customers (b) issuing of bank drafts and traveller's cheques, transfer of funds from one place to another, (c) serving as referee to the financial standing and credit worthiness of the customers ; (d) underwriting loans to

be raised by public bodies and corporations; (e) provide safety vaults or lockers for the safe custody of valuables; (f) acting as trustees and executing the wills of the deceased, and (g) compiling statistics and information relating to trade, commerce and industry.

Thus, commercial banks render valuable services to the community. A country with a well-developed banking system has a secure foundation of industrial and economic progress. It constitutes the very life blood of an advanced economic society. The following chart facilitates in understanding the functions of commercial banks.

TABLE
Economic Functions of a Commercial Bank



IMPORTANCE OF BANKS :

Banks are essential institutions for mobilizing savings for the purpose of lending. The banks, while lending, choose their debtors properly. As one authority has put it : "They discover the industrious, the prudent, the punctual, the honest, while they discount the spendthrift, the gambler, the liar and knave. There is, many a men who would he deterred from dishonesty by the frown of a banker though he might but care to the admonition of a bishap." In short, banks are public conservators of commercial virtues. A well knit banking system, therefore, secures- a good foundation for nation's industrial and economic progress in the following ways :

1. In the first place; a banking system **accelerates the rate of capital formation** in

- the country. The basic malady that effects a developing economy is the tardy rate of capital formation. The essence of capital formation, according to Nurkse, is the diversion of a part of society in currently available resources for the purpose of increasing the stock of capital goods so as to make possible an expansion of consumable output in the future. Now the mere existence of a sound banking organization tends to encourage savings, thrift, economy and investment, facilitates the interchange of goods and creates a general feeling of security and prosperity which, besides accelerating the formation of capital, also pushes up the national dividend.
2. Secondly, it acts as an **engine of balanced regional development** in the country.. The banks) help in the proper allocation of funds and they aid in the transfer of the surplus of one district to another where it can be more gainfully and efficiently employed. In this way, production is stimulated by the more rapid circulation of money and by the facility of obtaining the necessary capital to ride over difficult times. Bank loans as the manufacturers enable them to increase productive capacity and to adopt new method & machinery.
 3. Thirdly, the banking system helps in the **extension of size of market**. The commercial banks act as intermediary between the seller and buyer. Goods are supplied on bank guarantees which makes it viable for commerce and industry to cultivate and locate markets even in those areas which may be physically too distant otherwise to prove an economic proposition.
 4. Fourthly, bankers render great service in **controlling credit** & co- operating with the central bank.
 5. Fifthly, the banks **help develop entrepreneurship**. This role is being effectively played by underwriting new scrips by granting assistance for promoting new ventures of financial promotion under the joint guarantee system. In Germany, for example, scarcely a single important company has been founded without the collaboration of a bank.
 6. Lastly, banks provide a **convenient and safe deposit** for valuables and securities in transacting foreign exchange business and in placing their established reputation at the service of merchants and travellers by issue of various forms of letters of credit.

Hence there is no need, whatever, to over-emphasize the importance of banking as part and parcel of modern industrial and commercial culture. The role of banks in promoting development & growth, specially in the context of planning and breaking the trap of underdevelopment is an issue of topical interest to the students of any economy. To sum up, commercial banks have been rightly crowned as, " nucleus of all economic activities."

ROLE OF COMMERCIAL BANKS IN ECONOMIC DEVELOPMENT :

Besides performing the usual in 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 also an acute shortage of capital. Commercial banks help in overcoming these problems.

In India, the key feature of the post-nationalisation period in the field of allocation of credit has been growing functional diversification with increasing emphasis on credit to priority sectors. The concept of priority sectors for the allocation of commercial bank credit took definite shape during the brief period of the Social Control of Banks (1968). Initially, three sectors - agriculture, small industries and exports were officially recognised as priority sectors. Later a few more categories came to be added to the list, namely, road and water transport operators, professional and self-employed persons, retail trade and small business and education. The banks were directed to provide at least 15 percent of total credit by way of direct finance to agriculture and at least 25 percent of priority sector advances (or 10% of total credit) was to go to the 'weaker sections.'

Banks provide term loans to identified poor families under the IRDP (Integrated Rural Development Programme) scheme, which was launched in 1978-79 as a major poverty alleviation programme. Its main objective has been to take above the poverty line the families in the identified target groups by creating substantial employment opportunities in rural areas and by enabling them to acquire productive assets with the help of Government subsidy and term loans from banks. The target groups are scheduled castes/tribes, agricultural labourers, rural artisans, marginal and small farmers, etc.

Commercial banks have also been lending extensively to the farmers both directly and, indirectly. The latest thrust was the introduction of service area approach in 1989. Under this, all the villages have been allocated to different branches of banks in such a way that each branch has a cluster of 15 to 25 villages. The branches have to survey the village's allocated to them and prepare financial plans for each of them. However, on the demand of the Panel of Bankers of the Indian Banker's Association (in 1998), the SAA was given up.

Another notable feature has been the shift of banking from the big customers to small ones. In the field of bank advance too, small scale industries have come to occupy a prominent place.

Thus, commercial banks have come in a big way to help agriculture and other hitherto neglected priority sectors and making the task of economic development easier.

CREATION (AND DESTRUCTION) OF CREDIT

All banks are engaged in the creation of credit. Creation of credit is one of the most important functions of a modern bank. Commercial banks are defined as "purveyors of money" (Sayers). A bank has sometimes been called a factory for the manufacture of

credit, or what Harry G. Johnson calls as "producers of money". Money can be created or destroyed in the sense that its supply is increased or decreased by the Government or by the commercial banks. In this section, we are mainly concerned to show the process and mechanism involved in the creation & destruction of money in the above sense.

Creation of Bank Credit: Demand deposits are by far the most important constituents of total money supply in modern times. Demand deposits arise principally from (a) cash deposits (h) bank loans and investments. The former are called "**Primary Deposits**" and the latter "**Derivative Deposits**". In the case of primary deposits, there is no net increase in the money supply, since there is merely a shift from cash to demand deposits. Primary deposits, however, are capable of serving as basis for credit expansion and, therefore, for increased money supply. These are derivative deposits which result in a new increase in money supply, since bank credit is thereby created, to use Crowther's terminology, out of thin air. Thus, banks create credit in two ways: (i) by advancing loans, (ii) by purchasing securities. The process involved in creation of bank credit can be illustrated as follows :

The Single Bank : When a bank lends, the borrowers do not ordinarily take the proceeds in cash; instead he takes on an account in the bank. On the bank's balance sheet, loans (as asset) and demand deposits (as liability) both arise. A bank creates a demand deposit when it lends. In effect, since demand deposits are money; bank creates money.

To begin with, since the only limit on creation of demand deposits appears to be the requirement of legal reserves (say 10%), a superficial answer to the problem of how much a bank can lend, would be that it can lend (i.e., create demand deposits) upto a limit of 10 times (in our example 10% of reserves) its excess reserves. But this will happen only if there are no cash transactions. The reality is that borrowers don't take out loans, and pay interest on them, just to leave the funds sitting there. They want to spend the money. They will probably write cheques on their new demand deposits, which will probably be deposited in other banks by their recipients.

Thus, a single commercial bank can lend up to the amount of its excess reserves, and no more.* But it can lend or buy securities upto the amount of its excess reserves without endangering its legal reserve position.

An individual bank can, therefore, create money but only if it has excess reserves to begin with. As soon as it has created this money, it loses it to another bank when the money is spent. This is the key difference between the ability of a single bank to create money as compared with the banking system as a whole.

*A single bank here does NOT amount to a monopoly bank in the economy. If there is a monopoly bank in the economy, then the amount of demand deposits created will be the same as that created when the banking system as a whole is considered, provided we consider the same set of assumptions.

Banking System as a whole : The commercial banking system as a whole can expand credit many times the initial excess reserves. The process is called multiple credit expansion.

To understand the basic economic process underlying creation of deposits, we make certain simplifying assumptions. We suppose that there are many banks and each is required by law to hold 10 percent cash reserves against its transactions deposits. We also assume that the public does not change its currency holding throughout the process. Thus, there is no currency drain. It is also assumed that each bank will put all the money that is possible into earning assets (loans), so that there are no excess reserves.

Suppose that there is an initial deposit of Rs. 1000 in a bank, (name it as bank I). This increases both the demand deposits and cash reserves of bank I. By our assumptions, the bank will hold 10% (i.e., Rs. 100) of this deposit in its cash reserves, and put the rest 90% (i.e., Rs. 900) into loans. By our second assumption, the person who takes this loan will not keep the amount with himself, but deposit it with some other bank, say II. Now bank II has cash reserves of Rs. 900. By our assumptions, bank II will keep 10% (i.e., Rs. 90) of this deposit with itself and loan out the rest of 90% (Rs. 810).

Once again, the person who took this loan of Rs. 810, will deposit it in a third bank III, which will keep 10% of it (Rs. 81) in reserves, and loan out the rest 90%.

We see that total transactions deposits in these three institutions increased to Rs. 2710, whereas we had started with a Rs. 1000 deposit. Transactions deposits have, thus, been created by the banks; and since transactions deposits are money, it is equally accurate to say that the banks have created money.

Now the question is, where does this process stop? One way is to keep going through the arithmetic of successive rounds. But since this is a cumbersome process, we can find the solution by 'setting up' the problem in mathematical terms.

Now, Rs 1000 = 1000

$$\text{and } 900 = \frac{9}{10} \times 1000 \text{ (because } 900 = 90\% \text{ of } 1000 = \frac{9}{10} \times 1000)$$

$$810 = \frac{9}{10} \times 900 = \frac{9}{10} \times \frac{9}{10} \times 1000 = \left(\frac{9}{10}\right)^2 1000$$

and so on

Now let ΔB = amount by which primary deposits increased, (i.e., Rs. 1000 in our example)

$$R_d = \text{reserve requirement (10\% or } \frac{1}{10} \text{ in our example)}$$

$$\therefore \text{ Let } r = 1 - R_d \text{ (90\% = } \frac{9}{10} \text{ in our example)}$$

Thus, the preceding sequence of numbers can be stated symbolically as

$$\Delta B + \Delta Br + \Delta Br^2 + \dots$$

Let us suppose the process ends in n rounds, so that

$$S = \Delta B + \Delta Br + \Delta Br^2 + \dots + \Delta Br^{n-1} = \Delta B (1 + r + r^2 + \dots + r^{n-1})$$

Where S stands for sum.

Since the above is a geometric progression

$$S = \Delta B \frac{1-r^n}{1-r}$$

If n is very large i.e. $n \rightarrow \infty$, then $r^n \rightarrow 0$.

$$\therefore S = \Delta B \frac{1}{1-r}$$

But $1 - r = R_d$ (because $r = 1 - R_d$)

$$\text{Hence } S = \Delta B \frac{1}{R_d}$$

This gives us the total deposits created by the banking system.

In our example,

$$\Delta B = \text{Rs. } 1000$$

$$R_d = 10\% = \frac{1}{10}$$

$$\therefore S = 1000 \times \frac{1}{\frac{1}{10}} = 10,000$$

i.e., Deposits worth Rs. 10,000 were created (in our example) out of an initial deposit of Rs. 1000.

Thus, the total money/credit created by all banks together is the reciprocal of reserve ratio (R_d) multiplied by initial deposit inflow (ΔB).

The Destruction of Bank Credit by Banking System : Bank credit can be destroyed through a reduction in bank loans and investments; the extent of destruction depending on the prevailing reserve ratio. A reduction of each legally required reserve to support demand deposits leads to multiple contraction of bank throughout the banking system and, therefore, to a decline in the total supply of money.

Suppose that a depositor permanently withdraws Rs. 100 from his checking account that is not spent, but the money is kept in hoarding. The bank in question loses Rs. 100 of cash and Rs. 100 of demand deposits. Suppose that the reserve ratio is 10 percent. The

bank presumably had Rs. 10 against the Rs. 100 of demand deposit withdrawn, but has to pay Rs. 100 (and not Rs. 10). The bank has to use Rs. 90 of its legal reserves held against other demand deposits in order to meet the original depositor's demand for Rs. 100. This means that the bank's legal reserves have fallen below the required minimum and the bank will have to take some action to improve its cash-reserve position. This is where a 10 : 1 contraction of banking system begins. For the bank must call in loans for selling securities to the amount of Rs. 90, thus, involving other banks in the process of the 10 : 1 contraction of credit. If, however, the bank could acquire additional cash by borrowing from the central bank, it would not take deflationary action. Thus, a reduction of cash reserves below the legal minimum leads to magnified decline in total demand deposits and, therefore, to a sharp decline in total supply of money. The table below indicates the effect.

TABLE

Multiple Credit Contraction		
Reserve Rate Deposits	Initial of Cash	Magnified Contraction in Total
10%	10 : 1	1000
2.5%	4 : 1	400
50%	2 : 1	200
100%	1 : 1	100

It is not difficult to understand why some economists favour a 100 per cent reserve ratio. A system of 100 percent reserve, it is believed would stabilize the price system since it would prevent an otherwise inevitable multiple credit contraction or expansion of bank money. But it is still a moot point.

Practical Limits to deposit expansion :

1. Cash Drain : The extent of credit creation depends on the amount of cash which commercial banks hold. The larger the amount of cash with the banking system, the greater will be the excess reserves and larger will be the credit creation power of the banks. It has been assumed that in the chain process of multiple credit creation all the reserves lost by a bank are gained by another bank and no payments are made in cash. In practice this may not be the case, for some reserves may be drained away from the banking system. It is quite apparent from this that presence of & cash drain amounts to an- increase in the reserve requirement, and thus, reduces the expansion potential of any given volume of excess reserves.

2. Excess Reserves : We have assumed that banks keep only as much reserves as they are legally required to do. In actual practice, banks usually maintain some "excess" reserve in addition to the statutory requirement. All banks need some cash to meet reserve requirement with the central bank. Higher the reserve ratio to be

maintained, smaller will be the relative excess funds- and smaller will be the volume of credit creation and vice versa.

3. General Policy of Banks : Any single bank cannot follow an expansionist or a contractionist policy for a long time; others also want to do so. They must march like a regiment in a parade. For example, if one bank expands credit enormously, only a fraction of the additional bank deposits thereby created will remain with it. As a result this bank will have permanent debit balances at the clearing house and its reserves with the central bank will dwindle. In other words, cash reserves will come down and it will find itself in a precarious situation.

4. Different Types of Deposits: We assumed that all the deposits are in the form of demand deposits only, while actually a large part of total deposits is in the form of time deposits. Since time deposits are not withdrawable by cheques and do not serve as money, the result of an increase in time deposits is to reduce the money supply. A shift from demand to time deposits limits the potential expansion of demand deposits.

5. Control by the Central Bank : The central bank has the duty of maintaining the value of money and is empowered to control commercial banks, for commercial banks also create money. Hence the restrictions imposed by the central bank (both quantitative and qualitative controls) would also affect the capacity of a bank to create credit.

6. Availability of Securities : Bank cannot create money out of their own. If we examine the balance sheets, we will find that against each deposit created by them they hold assets in various forms as shown in the asset column of the balance sheet. Availability of such assets like government securities, collateral securities, bills etc. is another important limitation. Total securities which can be offered at a point of time are restricted to a fixed amount.

7. Demand for Loans: In order to make loans, the banks must find customers who wish to borrow. If there is no or low demand for loans by businessmen and traders, banks will obviously not be able to create much of additional deposits. Thus, the amount of borrowing by the customers sets a limit to the amount of expansion of credit. This is specially so in times of depression.

8. Cash & Banking Habits : The total cash in the banking industry would depend upon the total cash deposited by the people which, in turn, depends on their banking habits. If for any reason, the people decided to hold more cash, the flow of cash into the banking industry and consequently its power to create credit will decline. How much cash the people will hold and how much of it they will deposit in banks depends upon the total cash supplied by the government and the central bank, as well as the banking habits of people.

Thus, we find that there is nothing mechanical and completely accurate about

using a 5: 1 or any other fixed ratio for multiple expansion. The process of multiple credit creation described above should, therefore, be taken to indicate that an individual bank would be able to expand its lending safely by an amount equal to its excess resources. If each bank adopts the safe rule of thumb of expanding by the amount of its excess reserves, a part of the additional reserves will pass over the other banks until, in the end, the increased reserves are spread over the system as a whole supporting large volumes of loans and deposits.

SIGNIFICANCE OF CREDIT CREATION

Credit creation vitally affects the level of economic activity in the country. Left to itself, the credit expansion or contraction may "boom the booms" and "depress the depression". Thus, credit control has a lot to do with the cyclical fluctuation in the economy. In the case of underdeveloped countries, credit creation has to be controlled to ensure economic growth stability. It can be easily understood that if the credit is allowed to be unduly created, prices rise and wages will rise alongwith. Inflationary situation is inimical to economic growth because entrepreneurs are deprived of necessary funds. Hence the monetary authorities pursue a policy of controlled expansion of credit to ensure economic growth with stability. Since money supply in a country depends on the volume of credit created, credit expansion plays a very vital role in determining the level of national income and the volume of employment in the country.

Check on Credit Controlling Creation : In any country, central bank is vested with the sole responsibility of controlling the credit in the economy. The various objects for which a Central Bank controls the credit are (i) to safeguard its gold against internal and external drains; (ii) to ensure stability to internal prices ; (iii) to achieve stability of foreign exchange; (iv) to eliminate fluctuations in output and employment; and (v) to assist in economic growth. The assistance is required not only in underdeveloped countries desirous of accelerating economic development, but also in developed countries desirous of maintaining and improving their living standards.

The central bank can control credit by the following methods

- (a) **Quantitative or General Controls which include :** (i) Manipulation of bank rate or discount rate; (ii) Open market operations; (iii) Varying cash reserve: requirements etc.
- (b) **Other Methods of Credit Control include** (i) Varying margin requirement; (ii) Secondary reserve requirement (iii) Rationing of credit; (iv) Direct action; (v) Moral suasion and (vi) Publicity.

All or combination of these methods is employed by the central bank to tide over credit expansion with a view of bringing; an equanimity in the economic situation. The detail regarding all these methods will be studied in another lesson in the next unit.

SUMMARY

A bank is an institution which deals in money. Modern banks perform several functions like accepting deposits, advancing loans, discounting bills creation of money, clearing cheques, financing foreign trade, financing industries and agency and general utility functions. However, creation of credit is one of the cardinal functions.

Commercial banks, defined as 'purveyors' of money, play an important role in the creation of credit money. A particular bank can create credit only to the extent of excess reserves, while the banking system as a whole can create multiple credit. The total credit creation of the banking system as a whole is equal to initial deposits multiplied by the inverse of cash reserve ratio.

Though, in theory, the banking system as a whole can create multiple credit given by the above formula, in practice, there are certain restrictions like the cash drain, amount of excess reserves, general policy of the banks, different types of deposits, availability of securities, demand for loans, banking habits of the people and the control by the central bank. In order to ensure economic growth, the stability under expansion of credit must be checked. The responsibility of controlling the credit in the country is vested with the central bank. The central bank employs, both quantitative and qualitative methods, to achieve the desired results.

Books Recommended

1. R.D. Gupta : Keynes and Post-Keynesian Economics
2. Dudley G. Lockett : Money and Banking
3. Suraj B. Gupta : Monetary Economics : Theory, Institutions and Policy.

Questions for Practice

Short Answer type :

1. Write short notes on :
 - 1) Gross interest
 - 2) Speculative demand for money
 - 3) Difference between money and capital market
 - 4) Definition of money

Long Answer Type Questions

1. Distinguish between gross interest and net interest and analyse gross interest into its various components.
2. "Interest rate is price not of savings but of parting with liquidity." Explain.
3. While explaining the uses and abuses of barter system, discuss in brief the evolution, kinds & significance of money ?
4. Out of Fisher's approach to the quantity theory of money and cash balance approach, which one you consider as superior and why?

LESSON NO. 1.6

INFLATION : Theories of Inflation**A. Meaning**

The word 'inflation' is the noun from the verb 'to inflate' which means 'to blow up' or 'expand'. As used in Economics, the term inflation refers to expansion in the supply of money in relation to the existing value of the available goods and services. Such a situation leads to a general rise in prices. But all increase in prices may not be due to expansion in the supply of money in circulation. There are other factors like the increase in the costs of production which may cause the prices to rise. So all increase in prices is not to be confused with inflation.

It is difficult to give a precise definition of inflation. It is not a single phenomenon capable of being precisely described. Coulborn defined it as "too much money chasing too few goods". Crowther associates it with the state in which the value of money is falling and the prices are rising. Gregory associates it with a state of abnormal increase in the quantity of money, Hawtrey attributes it to 'the issues of too much currency.' For all of them, inflation is a monetary phenomenon.

But another set of economists define inflation in terms of rising prices. Friedman describes inflation as a process of "a steady and sustained rise in prices." Ackley holds that it is a persistent and continued rise in prices. Emile James thinks, "Inflation is a self-perpetuating and irreversible upward movement of prices, brought about by an excess of demand over capacity of supply".

Inflation may sometimes occur without a rise in prices. It may occur due to a rise in productivity, i.e., cost of production may fall, but prices are kept stable and not allowed to fall. This led Paul Einzing to define it as, "a state of disequilibrium in which an expansion of purchasing power tends to cause, or is the effect of an increase in the price level."

Keynes' idea is that inflation is the result of the excess effective demand. True inflation can occur only after the level of full employment of resources is reached. He says, "so long as there is unemployment, employment will change in the same proportion as the quantity of money". Inflation may be desirable to set to work unemployed resources. It is only after full-employment has been reached that an increase in the quantity of money will lead to inflation, i.e., increase in prices.

But it may happen that some of the resources are more scarce than others. Such resources will come to be finally employed much earlier, than those whose

supply is large. It will mean that it will not be possible to increase the supply of goods using scarce resources. Prices of these goods will rise. If these goods form an important part of the economy, there will be a tendency for other prices to go up. In this case, inflation may occur even when some of the resources are unemployed.

B. Types of Inflation

On the basis of the rate of increase of prices or the speed, the following are the important types of inflation :

1. **Currency Inflation** : It results from the rise in the price-level due to expansion in currency or the printed money in the economy.
2. **Credit Inflation** : If the prices rise as a result of expansion in the bank credit, it is called credit inflation.
3. **Deficit Induced Inflation** : When public expenditure exceeds public income, the Government may take recourse to meet the deficit by printing more notes rather than resort to taxation and borrowing. The inflation which will, thus, occur may be described as deficit induced inflation. The Second World War was financed in India through deficit financing which resulted in inflation during and after the war. Deficit financing has been used as an important means to promote economic development under the Five Year Plans. The prevailing inflation is partly due to this method of financing economic development.
4. **Wage Induced Inflation** : If the wage-earners succeed in forcing employers to pay higher wages, their incomes will rise. Volume of goods and services remaining the same, prices will rise and inflation will occur. It will be profit induced inflation if productivity of labour increases but wages are kept low with the consequent increase in profits or incomes of entrepreneurs.
5. **Open Inflation** : This type of inflation occurs when high money incomes lead to high demand for goods with consequent increase, in prices.
6. **Suppressed or Repressed Inflation** : It takes place when Government intervenes directly to control prices through various measures. Government cannot allow prices to rise beyond certain limits for fear of adverse public reaction. It may impose price controls and rationing etc., thereby preventing people from spending their incomes on as many goods as they will otherwise do. The inflation may show itself not in the rising prices, but in the accumulation of cash, bank balances and other forms of encashment of wealth in the hands of people. Such a situation is described as suppressed inflation. The forces to increase the prices are there and they may arrest themselves

if given an opportunity by lifting controls.

- 7. Latent Inflation :** During war savings increase as spending is not possible due to shortage of goods. These savings have the potential to generate inflation. This type of inflation will be described as latent or lying hidden.

Degrees of inflation : Open inflation may assume any of the following forms (as shown in figure No. 1) :

- (i) **Creeping Inflation :** When prices rise slowly (OA).
 (ii) **Walking Inflation :** When the price rise is more pronounced as compared to creeping inflation. (OB).
 (iii) **Galloping Inflation :** When price rise is fast, it becomes running or galloping inflation. (OC).

These stages of inflation have been compared with the stages through which a new born baby passes. He creeps, then walks and ultimately becomes capable of running and then galloping.

(iv) **Hyper-inflation :** Hyper means over or above. It is a special type of inflation which occurs during the war or after that. It damages production grievously. It upsets the social order. It encourages thrift by hoarding at the cost of investment. (OD).

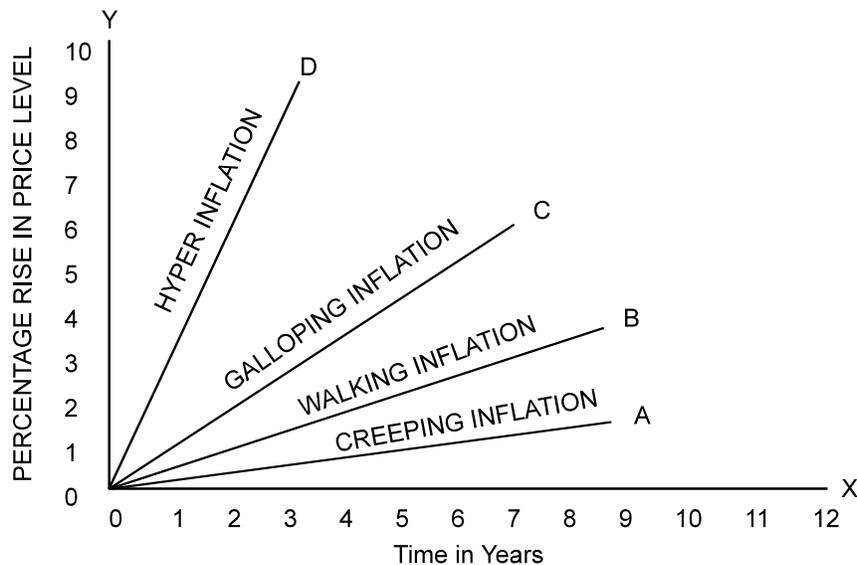


Fig. I : B.A. II (ECON). Lesson No. 13

C. Cause of Inflation

There has been a good deal of discussion regarding the cause of inflation. Since the end of the Second World War, three major theories or explanations have emerged. These are :

1. The Demand Pull Inflation : It is the traditional theory of inflation. It says that inflation is caused by an excess of demand (spending) compared to the available supply of goods and services at existing prices. The classical economists considered that money supply is the key factor as only an increase in money supply in accordance with the quantity theory of money, is capable of raising the general price level.

Modern economists, however, interpret the demand-pull to mean an excess of aggregate money demand relative to the economy's full-employment output level. The theory is based on the assumption that the prices of goods and services as well as economic resources are responsive to supply and demand forces. They move upward under the pressure of high level of aggregate demand. The excess demand in the economy originates in the large scale investment expenditure either in the public or in private sector. It exceeds the total output. Excess demand brings about increase in prices, thereby leading to demand pull inflation.

Demand pull inflation is ordinarily accompanied by increase in money supply. But it may also be caused without increase in money supply. This happens when marginal efficiency of capital or marginal propensity to consume goes up leading to an increase in expenditures and hence prices. This type of inflation is considered controllable by demand reducing monetary and fiscal policies.

The excess demand approach was further developed by Keynes, Wicksell and other Swedish economists.

2. Cost-push Inflation Theory : This theory says that prices, in addition to being pulled up by excess demand, are also pushed-up as a result of rise in the cost of production. According to the theory, prices rise as a result of rise in the cost of raw materials and wages. Inflation occurs because some producers, or group of workers or both, succeed in raising in the prices for either their product or services about the levels that would prevail under conditions of competition. In other words, inflationary pressures originate with supply rather than with demand. Then they spread throughout the economy.

Inflation of cost-push type originate in industries which are concentrated in few hands and in which sellers exercise considerable influence on prices and wages. This type of inflation cannot occur in an economy in which pure competition prevails. Since this inflation is due to the forces on cost and supply side, application of fiscal and monetary measures may help to cure it only by causing increased unemployment and slower growth. Experts favour measures which would reduce rather than eliminate this kind of inflation.

This theory became popular during the Second World War and the post-war period immediately following it.

A variant of cost-push theory holds the sectoral shifts in demand to be the

main cause of inflationary process. When the cost of tractors goes up due to the high cost of steel, the costs of agricultural products like food also move up necessitating a further increase in wages and so on. Inflation, thus, spreads like the wildfire to the other sectors of the economy. Rise in wages leading to a further increase in costs step up a spiral. The spiral is broken only when a new equilibrium is established. At this new equilibrium, the level of output will be below the full employment level. A situation arises in which all the higher priced output will not be purchased. This means that cost-push inflation is not likely to be self-sustaining as is sometimes believed. In other words, the rise in wages and costs leading to a rise in prices will come to an end.

The theory points out that in order to reduce unemployment, a slowly rising price level is better than a slowly falling one.

Mixed Demand Inflation : Many economists have come to believe that inflation is due to combination of both demand- pull and cost-push factors. The process may be started either by the demand-pull or the cost-push factors, but it can go on because the other forces also re-inforce collectively. As an explanation of the causes of inflation, the demand-pull and cost-push approaches are supplementary rather than competitive.

3. The Theory of Structural Inflation : The structural inflation hypothesis or sectoral demand shift inflation theory shows that inflation may be the consequence of internal change in the structure of demand. It is based on the fact that in many sectors of the economy wages and prices are flexible upward in response to increase in demand, but not flexible downward when demand declines. The emphasis is on the fact that inflationary pressure can be generated by internal changes in the composition of demand alone. Such changes in the structure of consumer tastes and desires are a part of the economic process in a dynamic economy. The expansion of demand for the output of particular sectors will lead to wage and price increases in these sectors. This will be so because wages and prices have a tendency to move upward when demand is rising. But the contraction of demand in other sectors will not lead to any downward movement of prices in same sectors. The average level of price, however, will surely rise.

This theory makes price inflation an inherent of the process of resource allocation, if wages and prices are flexible upwards but not downward. The theory differs from the earlier two theories in emphasising changes in the composition of demand. It says by implication that ordinary monetary and fiscal measures are unable to cope in this kind of inflationary situation. These measures may control aggregate demand, but not the structure or composition of demand. It can be dealt with by different type of measures.

D. Remedial Measures to Control Inflation

As already explained, demand-pull and cost-push inflation respond, more or less, to fiscal and monetary measures, though structural inflation requires a different set of remedies. In case of demand-pull and cost-push situations, inflation is due to the fact that total expenditure is running ahead of the total volume of goods and services and resources of all kinds. To control inflation, it is necessary to limit the total expenditure on goods and services to the available supply of goods and services.

Total expenditure falls under the following five heads :

- (a) Personal expenditure on consumption;
- (b) Private investment;
- (c) Government expenditure;
- (d) Public investment; and
- (e) Foreign investment or the balance of international payments.

Leaving aside the last item, Government expenditure and public investment cannot be easily curtailed during normal times. But chances of cuts in them are not ruled out. Moreover, personal consumption and investment generally form the most important part of the total expenditure. Steps to control these two items are naturally important. They are :

1. Fiscal Policy : During inflation fiscal policy aims at controlling excessive aggregate spending. The main instruments of fiscal policy utilised to achieve this purpose are :

(a) Budgetary Policy : The budget should be so managed that, during periods of inflation, tax rates should be raised and surpluses accumulated. Higher taxation would mean transfer of purchasing power from the individuals to the Government. The Government can utilize the surpluses to retire the outstanding Government debt or to meet deficits during periods of depression. Individuals would be left with less to spend.

The method became popular with the publication of Keynes' General Theory. According to it, deliberate attempts are to be made to adjustments, expenditures and public debt so as to check-excessive aggregate spending in times of inflation.

The difficulty of making use of this method lies in the inability to predict an inflationary boom. Adjusting the budget to fast moving economic conditions is still more difficult.

(b) New Taxes : Taxes determine the size of disposable income in the hands of general public. During inflation, besides increasing the rates of old taxes, new taxes should be levied to wipe off the surplus purchasing power. But the new taxes and higher rates of old ones should not discourage investment or lead to business recession. Expenditure tax and excise duties are anti-

inflationary in character. Government should aim at levying such taxes as reduce disposable incomes and demand particular commodities rather than aggregate demand. The method is quite a powerful and effective weapon in controlling inflation.

(c) Public Debt : In the period of inflation, public debt has to be managed in such a way as to reduce the money supply in the economy and to cut down expansion. New borrowings should be avoided. It would be better to retire debt through budget surpluses. But borrowings from non-bank public through the sale of bonds and securities curtail consumption and private investment and non-inflationary in effect. Borrowings from the banking system, however, are highly inflationary.

(d) Public Spending : During inflation, the best policy is to reduce Government expenditure to control inflation by giving up or postponing the construction of various types like school buildings, hospitals, parks etc. But there is a minimum beyond which it may not be possible to lower Government spending and defence considerations.

2. Monetary Policy : Some of the methods employed in monetary policy to control credit an important item of money supply, are quite old, while others have been developed in recent years. Some of these methods like the bank rate, open market operations, etc. are quantitative as they are intended to control the quantity or volume of credit by commercial banks. Other methods like regulation of consumer credit etc. are selective or qualitative because they intend to control certain types of credit and not all credit.

(a) Bank Rate : Bank rate is the minimum rate at which the central bank of a country discounts first class bills of exchange of advance loans against approved securities. It is fixed by the central bank and is sometimes called the discount rate. There is a direct relationship between the bank rate and the other money market interest rates. Changes in the bank rate are followed by changes in the interest rates charged by commercial banks on bank loans and advances.

Bank rate is an important instrument of credit control. Under inflationary conditions, the raising of the bank rate will discourage credit creation. A rise in the bank rate will raise the cost of borrowing and make it dearer. This will discourage businessmen, entrepreneurs, speculators and traders to borrow more. The volume of bank credit will be reduced. Activities which depend upon borrowed money will slow down. Dealers will keep less in stocks and will reduce order to producers of goods. Productive activity will be reduced. Unemployment will increase. Price and money incomes will fall.

But for the bank rate policy to be successful, it is necessary that the money market in the country should be well co-ordinated so that the effect to change in

the bank rate is felt by all the rates of interest prevailing in money market. Again, the economic structures of the country should not be rigid so that changes in money and credit conditions also lead to changes in costs, wages, prices, etc.

(b) Open Market Operations : This method involves the purchase and sale of Government securities and other credit instruments in the open market by the central bank. It is an additional and, to some extent, alternative instrument used by a central bank to control credit. In a period of inflation, the central bank, wishing to reduce the volume of credit, sells securities to the public. If the payment is made by the public in cash, the quantity of money with the public to that extent is reduced. If payments are made by cheques on commercial bank, the latter's cash balances are effected. They are, thereby, compelled to reduce the volume of credit. Opposite course of buying securities is followed during depression for expanding credit.

There are many limitations to the working of open market operations as a method of credit control. Credit contraction by the commercial banks shall not take place if the businessmen have expectations of high profits. The banks will lend even if they have low cash reserves. They may ever replenish their funds by discounting their securities at the central bank. Much will depend on the willing cooperation of the banks to the line laid down by the central bank.

Open market operations constitute the chief instrument of credit control in countries like U.K. and U.S.A.

(c) Changes in the Reserve Requirements : In every country commercial banks are required by law or custom to keep as deposit with the central bank a certain percentage of its time (fixed) and demand (current) deposits. The idea is to assure liquidity and solvency of these banks. In a situation of inflation, the central bank asks these banks to deposit a higher percentage of their deposits with it. Say instead of 5% the limit is raised to 10%. The banks will have to reduce their loans and advances in order to additional 5%.

The method has some limitations. In an inflationary period, commercial banks operate with small amount of cash due to optimism. Again, if gold is flowing into the country due to favourable trade balance, the effect of higher reserve requirements will be neutralised. Because of the limitations, the method has to be used with care.

(d) Regulation of Consumer Credit : The central bank is authorised to lay down conditions for the proper regulation of consumer credit, extended by the commercial banks of a country. The purchase of consumer durables like houses, furniture, electronic and household appliances etc. comes to be regulated. During inflation there is a tendency to use most of the credit for expenditure on consumer durables. This makes credit expansion a danger to the stability of the

economy. The method limits the amount of credit that might be given by the commercial banks. Regulation of consumer credit helps to restrict general price movements.

(e) Margin Requirements : 'Margin' refers to the difference between market value of securities and the amount borrowed against these securities. This method was first tried in U.S.A. In recent years, it had also been used in India to restrict speculation and hoarding of essential goods. During an inflationary period the central bank can ask the commercial banks to raise the margin from 20% to 30%. It will mean that a bank giving a loan against a security whose market value is 100 will now give only Rs. 70 and not Rs. 80 as earlier. The central bank can altogether stop the commercial banks from giving loans against any particular security or commodity. This will help to reduce the hoarding of such a commodity with the help of bank credit.

(f) Moral Suasion : This method implies informal request by the central bank to commercial bank to contract loans in time of inflation. In those countries where central banks is looked upon as leader in financial affairs, it can always extend its moral influence on the commercial banks as regards the credit policy they should pursue. Moral suasion makes it easier for the central bank to get willing and active cooperation of the banks. But its success depends upon the prestige and authority enjoyed by it over other banks.

(g) Direct Action : This method is used to a great extent these days. Direct action means that the central bank through directions and restrictive measures, can force the bank to follow a desired policy concerning lending and investment. In 1956 and 1958, the Reserve Bank of India prohibited the commercial banks to grant excessive advances against commodities like wheat and rice to stop speculation in them. The danger in this method is that the commercial banks may resort to illegal methods and underhand means to ignore the directions.

(h) Rationing of credit: It is used to control excessive expansion of credit. The central bank has the power to allow only a fixed amount of accommodation to other banks to rediscount their bills etc. This restricts the capacity of these banks to borrow from the central bank and reduces the extent of credit they create.

(i) The method of **propaganda and publicity** is followed to propagate the views of the central bank about a particular financial policy. This helps to reduce opposition to its views.

Fiscal and monetary measures discussed above will tackle the problem of inflation from the side of demand. But it is equally important to take a number of steps on the production front to increase the supply of industrial and agricultural goods. For example, elimination of transport bottlenecks, provision of irrigation facilities, removal of industrial disputes, elimination of raw material shortage etc. should be paid the required attention. Price control and rationing may also be helpful.

LESSON NO. 1.7

TRADE CYCLES : MEANING AND PHASES**A. Introduction**

A capitalist economy is characterised by economic fluctuations. These fluctuations in economic activity imply fluctuation in income, output, employment and prices. A period of prosperity is generally followed by a period of depression and vice-versa. These alternating fluctuations in business activity are referred to as the Trade Cycle. The trade cycle, in short, is an alternate expansion and contraction in overall business activity. When there is an upward trend in income, output, employment and prices, the situation is referred to as wave of prosperity. The wave of prosperity is followed by a wave of depression. During depression income, output, employment and prices show a downward trend. The wave of prosperity is replaced by a wave of depression and vice-versa. The period during which income, output and employment expand is called the period of expansion. There is a big spurt in economic activity. This stage is also known as boom period. The period of expansion is followed by the period of contraction. This phase is characterised by low income, low output, low employment and low prices. Business activity is at its lowest ebb and firms curtail their output. There is an atmosphere of all round pessimism and despair. The phase of falling prices and declining output and employment is known as depression or crisis. Shopkeepers sit idle as very few people come to make purchases. As stocks pile up, retrenchment in factories starts. So there is mass unemployment.

Boom as well as depression is harmful for the society. Economists have suggested various solutions to overcome this problem. We shall, first of all discuss the characteristics of a trade cycle.

B. Characteristics of Trade Cycle

Cyclical business fluctuation take place in every capitalist society. There are certain characteristics which are common to all trade cycles. Two important characteristics of the trade cycles are : (i) Synchronism, (ii) Periodicity.

(i) Synchronism : Trade cycles are, generally speaking, all embracing in nature. The World today is one economic unit. If one country is in distress, other countries cannot remain unaffected. Inside a country, these upward and downward movements tend to spread from one industry to the other. When some industries are depressed, others cannot be in a prosperous condition. If there is depression in the economy, then all the industries are in depressed state and

such a situation forces of demand are more dominating than the forces of supply. As a result, prices start rising. When prices rise, cost of production does not keep pace with it. It lags behind. Thus, the margin of profits increases. No doubt, there is a rise in wages and in the rate of interest. But the rise in them falls short of the rise in prices. Attracted by rising profits, producers undertake new production plans. Banks expand credit to enable the entrepreneurs to execute these plans.

(ii) Boom : Encouraged by rising profits entrepreneurs start investing more and more in productive activities. Every effort is made to increase the volume of investment. Optimism grows and spreads far and wide. Entrepreneurs go on investing their profits in gainful activities pertaining to various branches of the economy. As a result of all this, prices rise further. Profits and production also increase. There is prosperity in the economy. Bank credit is expanded further and this leads to a further rise in prices. Increase in a new investment leads to increase in consumption and, as a result of the working of the multiplier, there is manifold increase in income. Thus, this phase is characterised by increased production, high capital investment in basic industries, expansion of bank credit, high profits and full employment.

As the boom reaches new heights, such forces come into operation as to lower the marginal efficiency of capital. So long as people are confident and hopeful about the future the marginal efficiency of capital remains high. But a stage comes when this confidence is badly shaken. This happens when costs rise, factors of production become scarce. Bottlenecks begin to appear and cost calculations are upset. (Consequently some firms collapse). This makes the businessmen over-cautious. They begin to stay away from new projects and even stop the expansion of existing projects. Thus, optimism is replaced by pessimism. Boom is followed by a burst.

(iii) Recession : The tendency towards recession now sets in as the marginal efficiency of capital declines. Investment activity is curtailed and the cumulative process now starts working in the reverse direction. It goes on gathering momentum. Businessmen stay away from enterprises. The expansion of their existing enterprises is also postponed. They try to sell or convert their capital assets into cash. In other words, a fall in the M.E.C. is followed by a rise in the liquidity preference. Savings are not invested and they are rather kept in liquid form. The impact of all these developments is a decline in the income of the community. This adversely affects the aggregate demand for goods and services. Prices, therefore, begin to fall. As prices start falling, customers postpone their purchases, joint stock companies start disposing of their stocks. This accentuates the depression. The multiplier works in the reverse direction and causes decline in income to a greater extent than the actual decline in

investment. The economy finally slips into the depths of depression.

(iv) Depression : The downward trend of business and industrial activity makes producers introduce retrenchment schemes to curtail their output. This causes unemployment on mass scale. All constructive activity comes to a stand still. As most of the people are unemployed, demand for consumer goods also declines. Thus, consumer goods industries are adversely affected. Unemployment leads to further unemployment. Banks also get panicky and begin to withdraw loans from businessmen. Some firms go bankrupt. Many firms collapse. Failure of one firm leads to the failure of other firms. The period of misery and hardship starts. There is general feeling of distress and gloom. This phase is called depression. The cycle is complete.

Economists have put forth, from time to time, various theories with regard to the origin of trade cycles. We can divide theories into two parts : (a) External Theories, (b) Internal Theories.

D. Theories of the Trade Cycle :

(a) External Theories : Some economists are of the view that trade cycles originate because of the external factors. They include sun spots, increase in population, new inventions, political events etc. in external factors. According to Stanley Jevons, "certain dark spots appear at definite interval on the face of the sun which effect the transmission of heat to the earth". When the agricultural crops fail due to unfavourable climate conditions consequent upon the appearance of sun spots, the entire economy is engulfed in depression. Due to the fall in the income of the farmers, the depression in the agricultural sector soon spreads to the industrial sector and hence the entire economy is in its grip. On the other hand, a good climate affects agrarian and industrial sectors favourably, thus, giving rise to a period of prosperity.

Investment activity gets a fillip when there is an outbreak of war. Increase in investment leads to increase in employment and production. Economic activity gets a boost and people become prosperous. When war comes to an end prosperity also disappears.

Increase in population and new inventions also help in increasing the volume of investment which stimulates capital formation. This leads to more output and employment, prices and profits increase. This expansion brings in the era of prosperity.

According to the external theories, the origin of fluctuations can be traced to the factors mentioned above. But none of these theories give satisfactory explanation of the complex phenomenon of trade cycle.

(b) Internal Theories : According to some economists, the business cycle fluctuations are better understood and analysed with the help of internal factors.

(i) Monetary Theory : Some economists are of the firm belief that money supply and bank credit are the basic cause of the occurrence of the business cycle. As the theory postulates, an increase in money supply lowers the rate of interest which, in turn, stimulates investment. An increased money supply results in increased consumer outlays also. Thus, there is increase in effective demand which raises the level of income.

But a stage comes when further expansion of credit is stopped. The rate of interest rises and this leads to a decline in investment. Consumers reduce their purchases and consequently there is a fall in effective demand. The downward trend of the trade cycle sets in and gradually gathers momentum.

(ii) Under-Consumption Theory : The underlying cause of depression according to this theory is the inequalities of income in capitalist society. The rich people have a high propensity to save. So they save and invest their savings in business. On the other hand, a large number of people are very poor. They do not have adequate purchasing power to buy the goods produced by the expanding business enterprises. This results in over-production. Thus, too much saving or too little consumption is the cause of depression. But with the lapse of time the marginal propensity to save is reduced. This leads to the emergence of the upswing of the trade cycle. This is how fluctuations continue to occur in the economy.

(iii) Over-Investment Theory : This is another explanation of the trade cycle. According to this theory, over-investment in investment goods industries is responsible for occurrence of the business cycle. Housing-Industry, Iron and Steel Industry, Engineering Industry etc. are included in investment goods industries. During boom period some funds are invested in these industries as compared to the consumer goods industries. Easy availability of credit makes it possible for efficient as well as inefficient productive units to start and expand production. So an imbalance between consumer goods industries and investment goods industries is the result. When banks take a note of the excessive expansion of credit, they raise the rate of interest. This checks further investment. In order to return loans, producers start disposing of their stocks as soon as possible. Consequently, depression starts in which investment goods industries lose more as compared to consumer's goods industries.

(iv) Psychological Theory : This theory attempts to explain the business cycle phenomenon on the basis of changes in the psychology of the producers. When businessmen and entrepreneurs are hopeful and optimistic, they are quite ready to undertake new investment schemes. Consumers also increase their purchases as they expect further rise in prices. This generates boom conditions in the economy. But when hopes of any entrepreneur do not materialise, the

entire business community becomes pessimistic about further business prospects. New investments are stopped. There is general atmosphere of gloom and despair. This results into a slump in the economy. According to this theory, business fluctuations are the result of waves of optimism and pessimism among producers and entrepreneurs.

The theories given above are historical in nature and they give only partial explanation of the business cycles. Besides these theories, there are two other theories which are successful to a large extent in giving adequate explanation of the phenomenon of business cycles. Their study, therefore, becomes very essential.

(v) Keynes' Theory of Trade Cycle : According to Keynes, cyclical fluctuations are due to fluctuation in the rate of investment. Fluctuations in the rate of investment are due to fluctuations in the marginal efficiency of capital. The MEC is largely governed by the prospective yield of a particular capital asset. A rise in MEC leads to increase in investment which, in turn, leads to more output and employment. In the economy, the process of economic expansion goes on until the peak of boom is reached. At this stage, certain economic forces come into operation which exert pressure on MEC in the downward direction. The MEC starts declining as there is increasing abundance of capital stock. This has a depressing effect on investment and the volume of investment is reduced. As trade cycle is a cumulative process so a decline in the MEC leads to contraction of income and employment. The reverse working of the multiplier results in depression. But when there is an improvement in the MEC, investment gets a stimulus, increased investment through the working of the multiplier leads to higher levels of income. Like this, fluctuations in the economy continue to take place.

We have given above the substance of the Keynesian theory of trade cycle. Now we shall discuss this theory in detail so as to comprehend the phenomenon of trade cycle. We begin with the period of expansion. There is a lot of business activity during this period. Businessmen are optimistic about further expansion and their expectations about profits are quite high. The rate of interest is more or less sticky, in the short-run. On the other hand, the MEC is considerably high. In such circumstances, it is profitable for the businessmen to start new undertakings and consequently bring increase in income which is many times greater than the initial investment. This process goes on until there is boom in the economy.

At this stage, certain economic forces influence the marginal efficiency of capital. What are these forces ? (i) As a process of expansion goes on, cost of production starts rising on account of the increasing scarcities of material and equipment. (ii) The increasing abundance of output tends to lower prices and this adversely affects yield on investment. These two causes work together to depress the marginal efficiency of capital. The main check of rapid economic

expansion is Keynesian consumption function. When there is an increase in the income of the people, expenditure on consumption does not increase in proportion to the increase in income as the marginal propensity to consume is less than unity. This sets a limit to the expansion of output of consumption goods as their demand does not increase in the same proportion in which income has increased. This fact affects the MEC adversely.

As the MEC declines there is an increase in liquidity preference which raises the rate of interest. So, on the one hand, the MEC is declining and, on the other rate of interest shows upward trend. The result is that optimism gives place to pessimism. New investment is stopped and the expansion of the existing projects is also held in check, rather the volume of investment is curtailed. Multiplier starts working in the reverse direction and decrease in income is more greater than the decrease in investment. The economy faces depression and mass unemployment.

We have seen that just as the depression is due to the decline in the MEC, the boom is due to improvement in the MEC.

Criticism

- (i) Keynes has explained the operation of the business cycles on the basis of the multiplier. But multiplier alone is not adequate to explain the whole phenomenon. Multiplier and accelerator are both required to give an adequate and comprehensive explanation of trade cycle.
- (ii) Keynesian theory does not throw much light on the phenomenon of trade cycle. In fact, Keynesian theory is the theory of income, output and employment.
- (iii) Keynes's plea for government intervention and socially controlled rate of investment as a remedy for depression has not been relished by critics. They point out that acceptance of his suggestions would lead to the risk of too much intervention by the government in economic affairs.

So, this theory also does not furnish an adequate explanation of the phenomenon of trade cycles.

(vi) Modern Theory of Trade Cycle : According to modern theory, multiplier acceleratory interaction explains business fluctuations in a capitalist economy. Multiplier alone cannot provide an explanation of the trade cycle. The multiplier expresses a relationship between initial increment in investment and the final increment in aggregate income. Increase in income leads to increase in demand for consumption goods which, in turn, encourages investment. So, where as multiplier shows the effect of change in investment on consumption and hence on income, the accelerator shows the effect of change in consumption on investment. The multiplier shows the dependence of consumption on investment. When investment increases,

income increases many times more than the initial increase in investment (multiplier). When there is an increase in income, consumption will increase and as a result of it more investment will be undertaken to meet increased demand (accelerator). The increased induced investment will raise the level of income and employment in the economy. This interaction of the multiplier and the accelerator lands the economy in the upswing of the business cycle.

But the upswing has its limits. According to the Keynesian theory, the marginal propensity to consume declines as income of the people increases. A decrease in consumption results on a greater decrease in investment on account of the reverse working of the accelerator. This results in a further decline in consumption which, in turn, leads to a further fall in investment. The reverse working of the accelerator and multiplier now initiates a downswing which goes on accumulating. Ultimately, the economy is in the grip of depression.

Multiplier-accelerator interaction or their combined effect is also known as super multiplier. The following table will illustrate how the joint working of multiplier and accelerator brings about an accelerated increase in income. This is based on the following three assumptions :

- (i) Marginal propensity to consume = 0.5
- (ii) Accelerator = 2
- (iii) There is a time lag of one period between income and consumption.

Multiplier Initial Period	Initial Investment (Rs. Crores)	Induced consumption (Rs. Crores)	Induced Investment (Rs. Crores)	Aggregate increase in National Income (Rs. Crores)
1	20	0	0	20
2	20	10	20	50
3	20	25	30	75
4	20	37.50	25	82.50
5	20	41.25	7.50	68.75

As is clear from the above table, there is an initial investment of Rs. 20 crores in the first period. Since during the first period neither the multiplier nor the accelerator operates, the total income is equal to 20 crores. In the second period, the induced consumption is Rs. 10 crore because the marginal propensity to consume is 0.5 or 1/2. In other words, half of additional income received by the people is spent on consumption goods. The induced investment is Rs. 20 crore because assumed accelerator is 2. Thus, total income in the second period rises to 50 crores.

In the third period, induced consumption is Rs. 25 crores (as M.P.C. is 0.5, which is one half of the income in the period i.e., 50 crore). The induced

investment is Rs. 30 crore (i.e., double the difference between the induced consumptions in period 2 and 3). The total income in third period is Rs. 75 crore.

In the fourth period, consumption is Rs. 37.50 crore (as M.P.C. is $1/2$) induced investment is 25 crore - (i.e., Rs. 37.50 crore - Rs. 25 crore = Rs. 12.50 crore $\times 2$ = Rs. 25 crore). Total income now rises to Rs. 82.50 crore.

In the fifth period, total income falls down to Rs. 68.75 crore because both the multiplier and the accelerator become weak now.

Thus, the fluctuations in economic activity can be traced back to the combined effect of the multiplier and the accelerator. This theory furnishes with a better and more scientific explanation of the business cycle.

We have discussed above many theories of the trade cycle. The phenomenon of trade cycle is so complex that no single theory can give adequate and satisfactory explanation of it. But these theories, taken together, enlighten us to a large extent about the external, internal and other causes of trade cycles.

E. Measures to Control Business Cycle

There are two types of measures which can be undertaken to check operation of the business cycle :

- (i) Monetary Policy.
- (ii) Fiscal Policy.

(i) Monetary Policy : The fact is that we cannot altogether check cyclical fluctuations in economic activity. But we can mitigate their revenges. One measure to control them is monetary policy. Monetary policy implies control of money supply and bank credit by central bank, in order to achieve desired economic goals. Control of money supply is one of the most effective means to regulate output and employment in the country. Total supply of money consists of bank money, currency notes and coins. Central bank can increase or decrease it according to the needs of the economy. Moreover, central bank can utilise various weapons of credit control. These weapons are as follows :

- (a) Bank Rate Policy or Discount Rate Policy.
- (b) Open Market Operations.
- (c) Variations in Cash Ratio.

During depression central bank reduces its discount rate. This helps in the easy availability of credit which stimulates investment. Increased investment results in increased income, output and employment. Where there is boom, central bank utilises its measures to check and control expansion of credit. It raises its bank rate to achieve its desired goals. Another effective weapon is open market operations. Open market operations imply buying and selling securities in the open market.

Central bank buys securities from the open market when there is slump in

the economy. This leads to expansion in the supply of money. But whenever there is tendency towards over-expansion of business activity, central bank sells its securities in the open market. (People withdraw money from banks to purchase the securities). Similarly, supply of money can be varied by changing cash reverse ratio.

Monetary policy alone cannot be of much use to check the operation of trade cycle. Other measures are also to be adopted to achieve this objective.

(ii) Fiscal Policy : Fiscal policy denotes taxation, spending and borrowing (from public or banks) by the government. When there is depression in the economy the Government should increase its expenditure and, for doing that it should start public work projects, such as construction of roads, bridges, houses etc. The Government can also increase its expenditure by making provision for old age pensions, unemployment allowance and help to the needy and the poor people. The expenditure will provide additional purchasing power in the hands of the people and this, helps to fight depression and to offset the decline in effective demand. This will lead to increase in output and employment. Prices will also register an increase. But when conditions of boom prevail in the economy the Government should curtail its expenditure.

Similarly, the Government should reduce taxes during the time of depression. It should also borrow less from the public. The reduction in taxes during depression would lead to increase in effective demand which would ultimately result in more income and employment. But when there is over-expansion in the economy, the Government should raise its level of taxation and borrow more funds from the public to curb this tendency.

Sometimes, monetary policy and fiscal policy are combined together to achieve the desired results. Either of the two measures taken alone, may not succeed in its objective. Some economists suggest a control over international investment and international output to check the cyclical fluctuation in business. They are of the opinion that economic activity should not be left free and unaffected.

MONETARY POLICY : OBJECTIVES AND INSTRUMENTS**Introduction**

There is probably no field of economics in which the writings of economists have so strongly influenced both current thought and current problems of economic policy as in the field of monetary policy. In the post-war periods, economists generally regarded monetary expansion as a measure to stop depression. But whether control of money supply is an effective weapon to control inflation or not, was very much sceptical. Some economists took the extreme view and thought monetary restraint to be completely ineffective. But it was generally thought that the war time legacy of a large and widely held public debt was a major obstacle of the application of monetary restraint.

The post-Korean war inflation forced the termination of bond-support programme and thereafter monetary policy became the chief instrument of controlling short-run fluctuations. The availability of doctrine of monetary policy has left its mark on the field in as much as the majority of monetary economists would probably explain how monetary policy influences the economy by reference to its effect on the availability and cost of credit.

This idea was cherished in the pre-Keynesian period also, when monetary policy was the single established instrument of aggregative economic policy and price stability was its established objective. Keynesian economics brought in its wake the idea of fiscal operations and the objective of economic stability by maintaining full employment.

Role of money supply was viewed differently by different schools of thought. The classical economists were of the view that its effect was, only to cause an equi-proportional change in prices. Money was, thus, a passive factor in the basic functioning of economic system. Its effect was felt on prices alone and this was the chief reason why it was regarded important.

Such a belief in the classical dichotomy could not be dispelled even by subsequent development in the classical monetary theory. The credit for bringing money as a factor in economic analysis really belongs to Keynes. As Professor H.G. Johnson has observed "the fundamental contention of Keynesian monetary theory is that a monetary economy is essentially different from barter economy- that money is not merely a veil but exercises an influence of its own in the working of the economy." Keynes showed how money supply affected interest rate through liquidity preference and how interest rate in turn affected investment and economic activity.

Nature of Monetary Policy

Monetary Policy is as old as monetary system and money itself. There are evidences which suggest that even in ancient period, monetary management was known in Greece. The prince who minted the first coin was a monetary reformer and the princess who debased their coins to finance deficit were also monetary reformers. Managed currency was not entirely unknown to the ancient Egyptians, Greeks and Chinese who shifted to and from the shrines of their temples in order to counteract movements in the price level. But before 1914, the whole thinking about monetary policy was based upon the idea of automatic gold exchange system.

During the World War (1914-1919), this notion was almost shattered and monetary policy assumed new dimensions. In the modern sense, monetary policy aims at systematic regulations of the volume of money (currency as well as credit) with a definite objective in view. Monetary policy should be able to work both ways-forward as well as backward. Irrespective of objectives of monetary policy, it has attained a definite dimension in which it works. The objectives of monetary policy generally revolve around expansion or contraction of credit. It implies a positive endeavour to regulate the volume and value of currency and credit in a way that is considered to be in accordance with the interest of the increase of the welfare of the community, independently of the technical international considerations which has been in the past, regarded as being of paramount importance.

The genesis of monetary policy took place after the World War I, when the gold exchange standard showed a breakdown. Inflation in Germany and two conferences in 1920 in Brussels and in 1922 in Geneva compelled the Statesmen in the world to think about a new monetary system which was bound to effect the monetary policy in every country. Before that, as has already been stated, automaticity of gold exchange system was cherished because of which the idea of central banking was hailed as giving a lead in the great work of monetary reconstruction. But this was only the beginning of a herculean task. At the time, scarcely any one considered that the price level could or ought to be the care and the preoccupation, for less a main objective of policy of Central Bank. Increasing unemployment was a reminder to the world that the monetary problems, that of providing and working through satisfactory currency and credit machine, can be solved easily and finely before a distant future. The depression of the thirties provided future stimulus to the thinking of reforms in the field of monetary management.

In the recent past, the horizons of monetary policy have further been widened greatly. The Central Bank of a country has to decide whether to maintain or to change the terms on which it is prepared to grant credit; exchange control

authorities have to take action day by day and hour by hour; banking leaders and treasury officials have to be in constant touch with each other to consider the question that arise daily.

To define monetary policy in specific terms, it is control of availability, cost and the use of money and credit. The traditional agent of monetary policy is the central bank which works through the monetary system. More or less, it deals with the monetary system of a country. It may have been defined in different words by different monetary economists, all of them testify its concerns with the measures and decisions of a monetary nature.

D. Paul Einzing brands the monetary policy as the attitude of political authority towards the monetary system of the country under its control. Geoffrey Crowther defines monetary policy as the steps taken to reduce to a minimum the disadvantages that flow from the existence and operation of the monetary system. The definition given by Geoffrey Crowther clearly envisages the disadvantages of the monetary system and avoidance of such disadvantages from the monetary system can safely be called a passive monetary policy. An active monetary policy can be defined as a step or a number of steps taken by the monetary authority to promote the economic welfare of the economy as social sense. A blend of these two actions can be termed as the ideal monetary policy. To quote Paul Einzing again, monetary policy should aim at increasing the advantages and reducing the disadvantages that flow from the monetary system.

Monetary policy can be defined from another point of view also. All monetary decisions are measured irrespective of whether their aims are monetary or non-monetary and all non-monetary decisions and measures that aim of effecting the monetary system constitute monetary policy. In this category will be included the steps taken for influencing the value and volume of money and the monetary measures which pursue non-monetary economic, social or political aims. Monetary measures like debasements, inflation, deflation and devaluation etc. and non-monetary measures like price and wage controls, physical controls, budgetary devices, export drives, import cuts, quota system etc. will all come under monetary policy because they aim to influence the monetary situation in a country.

It is imperative to distinguish clearly between various allied policies. Monetary policy is quite close to fiscal policy and banking policy. The relationship between these is so close that often monetary policy and banking policy are taken as one whereas fiscal policy is considered as an end or means of monetary policy. They may be complementary and sometimes it may be difficult to draw a line between these-still they are different.

Fiscal policy mainly refers to measures taken through the mechanism of budget. It deals with the revenue, expenditure, borrowing, debts redemption etc.

The operations of these items as well as the relationship among these, form the core of fiscal policy. But fiscal policy cannot be segregated from the monetary policy altogether. Meeting the expenditure by deficit will increase the prices. Taxation certainly affects the general level of prices. Conversion operations definitely affect the power of banks to create credit and the amount of bank credit.

The difference between monetary and banking policy lies in the fact that banking policy is a part of money policy. Change in banking policy sometimes does not change monetary policy. For instance, the decision of selective credit control would change the banking policy, but there might be no overall change in the monetary policy, as the bank credit through selective credit control policy of the central bank of a country may not affect, the total volume of credit appreciably, but it may affect credit distribution among different categories of borrowers. Similarly, the policy with regard to new public issues of securities may produce monetary effects if it aims at influencing the total volume of capital investment. This will not fall in the category of monetary policy, on the other hand, if it merely aims at discouraging types of issues and seeks to prevent unwanted expansion in some industries and encourage expansion in other industries, it will amount to monetary measure.

Objectives of Monetary Policy

Monetary Policy of a country is an important aspect of its overall economic policy. It helps a healthy growth of the economy of the country, by adjusting money supply to the needs of growth, by directing the flow of funds in the required channels and by providing institutional facilities for credit in some specific fields of the economy.

The traditional agent of monetary policy is the Central Bank which works through the monetary system with the help of commercial bank and other credit institutions. Monetary policy is so closely related to fiscal policy that sometimes these are clubbed together as national financial policy. In the broader sense, monetary policy, fiscal policy and debt management cannot be thought of operating separately, but in conjunction with each other. Monetary policy, fiscal policy and debt management can be divided into watertight compartments. To fence out the Treasury would be to fence in the Central Bank and to stifle the effectiveness of both. However, in the narrow sense, monetary policy is identified with all the credit control measures of the Central Bank.

Monetary policy consists of the measures taken by the Central Bank to regulate credit. It operates through five interrelated factors, the availability of credit, the volume of money, the cost of borrowing, the prices of capital assets and the liquidity of the economy. The primary task of the monetary policy is the mobilisation of resources to the proper channels.

The identification of the objectives of monetary policy becomes our first task

if we want to analyse the appropriate monetary policy. Though objectives of monetary policy differ with the economic conditions of the country, still there is a spectrum of objectives that a country can adopt. Since monetary policy is a means to an end and in itself, it is expected to achieve certain objectives, determined by the monetary authority and/or the State. Its objectives, must be regarded as being part of overall economic objectives to the extent that monetary policy is concerned with subsidiary objectives of its own, these latter must assist in attaining the basic objectives of policy.

The objectives of monetary policy have been changing from time to time. The instruments available to the central banks also differ from country to country. Even for the same country, the objectives differ at different times. Monetary policy in the narrow sense has signified one thing at one time and another at another time. Its objectives change with the changes in the conditions of the economy. Empirically also, this type of generalisation can be tested. Still monetary policy has been directed to achieve a few traditional and set objectives.

Under gold standard, maintenance of exchange stability was the most important objective of monetary policy. Because the monetary system was an automatic system, the Central Bank was practically passive. The supply of money was regulated by the automatic inflow and outflow of gold. At that time scarcely anyone considered the price level would ought to be the care and preoccupation far less a main objective of policy of a central bank.

After the end of first world war, with the decline of gold standard, central bank was expected to exercise a discretionary influence on monetary system. The international monetary instability, the growth of nationalistic feelings, the rigidities in economic structure and the appearance of a huge volume of 'hot money' sounded the knell of the gold standard. In the words of Sayers, the inter-war period can, perhaps, be called the heyday of Central Banking. There was a deal of discussion about the objectives of monetary policy in the changed circumstances. Mac Millan Committee (1929-31) spoke of the Central Bank as being called upon to look after the maintenance of the parity of the foreign exchange without unnecessary disturbance to domestic business, the avoidance of the credit cycle and the stability of price level. In the changed circumstances, the regulatory functions of central banking were emphasised.

With the emergence of Keynesian Revolution, maintenance of full employment became the objective of monetary policy. With the advent of great depression in 1929, resulting in mounting unemployment, the role of monetary policy to stimulate total demand and thereby help maintenance of a high level of income was emphasised.

This was sought to be achieved by making available enough credit at a low cost. Thus, cheap money was adopted. But experience and the lesson of "General

Theory", made the people believe that monetary policy was completely ineffective. It is easy to discourage investment by raising interest rate, but we are not sure that lowering the interest rate would increase investment. Moreover, cheap money policy was indispensable to loan financed compensatory spending. The scope of effective anti-depression monetary policy is clear from the fact that even if credit policy is incapable by itself turning the trend of depression it can increase overall liquidity via open market operations and other conventional methods, thereby creating the monetary atmosphere necessary for the successful operation of more effective measures of fiscal and other policies.

After the second world war, the inflationary trends in the world again revived the interest in monetary policy, specially in the interest-rate mechanism. Dear money policy as a measure of controlling inflation caught the attention of the policy framers. The political feasibility of effective fiscal policy in the form of tax increases and reduction in expenditure was doubtful. Central Bank credit control measures seem to be more effective in controlling credit expansion. An additional reason was the relative freedom of the Central Bank to operate unpopular anti-inflationary monetary measures. The following extract from Radcliffe Committee Report amply bears this out :

"The most serious handicap of fiscal measures, as a method of operating on the level of demand, is that individual tax changes, as distinct from the budget total, have to overcome opposition on varied grounds having nothing to do with the general economic situation. Their timing, too, is handicapped by dependence on the parliamentary time-table; and there are real administrative difficulties in making frequent changes in many tax rates. The more flexible the fiscal weapons can be made, the less will it be necessary to rely on monetary taxation with sufficient flexibility, there will have to be more reliance on monetary measures."

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The latest of the objectives of the monetary policy attains a different shape as compared to the conditions explained above. Radcliffe Committee which examined the working of the monetary policy makes a list of a new set of objectives to be followed by the monetary authorities. They include the attainment of full employment, stability in the internal value of money, steady economic growth, some contribution to the economic development of other countries and strengthening of international reserves.

In this constellation of objectives, there are possibilities of conflict among these five objectives. Stability of internal value of money, remains the major objective. The Government independent of the economic situation in the country cannot decide at its own, which objective is the foremost. It depends upon the importance of each of these objectives.

To choose any one of these objectives is not a problem, but it is very difficult to bring out coordination and consistency among different objectives. In addition to traditional objectives, economic growth has become an important objective of monetary policy. In a developing country, economic development with an equitable distribution of income becomes a central objective of monetary policy. In the administration of development objective a number of difficulties may arise. Economic development is a moving target; it is indefinite. It is possible to predict the projected rate of growth, but to find out the ideal rate of growth is a problem.

Instruments of Monetary Policy

Having set out the general framework for the operation of the monetary policy, we can examine the instruments of monetary policy. In fact, the effectiveness of monetary policy depends upon the instruments of credit control. The technique of monetary control have to be conditioned by the pattern of banking and financial institutions. The extent of success of the policy depends upon the instruments employed.

The technique available to monetary authorities to maintain internal stability consists of (a) regulating quantity of the money and to some extent of the near money with the purpose of directing and influencing the volume of expenditure, (b) manipulating the level of interest rates or the relationship between short-run and long-run rates, and (c) regulating quality of credit according to purpose or use of it. The powers of the monetary authorities to regulate creation of money and of near money depends largely upon their power to control by direct means and the credit and instruments policies of the money creating institutions.

The techniques of monetary policy in a contemporary world are undergoing a rapid transformation. Formerly, exclusive instrument which most of the Central Bank in the world were using was the variation in the rates of interest at which the Central Banks were willing to discount bills. During the depression of the 1930's, however, monetary orthodoxy was gradually abandoned.

In recent years, Central Banks have become concerned, not only with the control of the volume of credit, but also with the flow of credit into specific sectors of the economy.

In India, this changed role of central banking has been the guideline since the first five year plan. The first plan states thus :

"Central banking in a planned economy can hardly be confined to the regulation of the overall supply of credit to a some what negative regulation of the flow of bank credit. It would have to take on a direct and active role, firstly in creating or helping to create the machinery needed for financial developmental activities all over the country and secondly, in ensuring that the finance available flows in the directions needed."
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With this objective in view, and depending upon the time to time

requirements of the economy, the Central Bank of a country applies constantly changing combinations of various instruments. These instruments can be quantitative or qualitative in nature. Quantitative techniques are applied through variations in the interest rate (bank rate), reserve requirements and open market operations.

(Qualitative) techniques are of recent origin. These measures consist of credit regulation for a specific sector (selective credit control) and moral suasion.

Of these, the most important and widely used instruments are bank-rate, open market operation and selective credit controls. The policy implication of these instruments of monetary policy have been analysed below :

Bank Rate

The bank rate or the discount rate as it is called in the United States, is the officially announced rate charged by the Central Bank of discounting of advances to member banks. In other words, it can be called as the cost of borrowing by the banking institutions from the central bank. By changing bank rate, the central bank affects the cost of borrowing and thereby influences the volume of credit.

In the monetary market, if it is organised one, there is a close relationship between the bank rates & the short-term money. The presence of an organised money market is very essential for the effective use of this technique because it is only in an organised money market, that the Central Bank can come to know that the current flow to bank credit and money is or is not in commensurate with the needs of the economy. Consequently, a change in the bank rate is commonly viewed as an amber light-an important index of the direction of the official policy.

Ostensibly, the official policy is successfully implemented through a responsive banking system, but technically, the effectiveness of a change in the bank rate should take into account its influence on the following :

1. Effect on enterpriser's expectations as to the profitability of new investment and the resulting effect on their demand schedule for credit.
2. Effect on credit rationing policies by financial institutions.
3. Effect on the increasing government bond rates, on the willingness of investors to take the capital loss resulting from the sale of securities to make private loans.
4. Effect of rising yields on government securities, on the eagerness of lending institution to earn higher income on private obligation.
5. Effect of declining capital value of the propensity to consume.
6. Multiplier effect of any initial decline of spending resulting from the above changes.

The above mentioned factors go to prove that the banking system must view a change in the official rates as a "caution light". The demand for credit must also be sensitive to cost, while as Howtrey suggests, "there is nothing to prevent

the Central Bank from pushing the rate up to the required level, it is only to small increase, the bank rate owes its real effectiveness."

In recent years, a great deal of controversy has entered around the question of the efficacy of the bank rate. Even monetary commissions of international repute, like the Radcliffe, have expressed their mixed feelings regarding the potentiality of this instrument. The final work has not been said, but it is definite that most economists regarded it of some importance.

But another aspect of bank rate, relatively unknown, assumes special importance. In developing nations, like that of our's with planned economies, where the public sector accounts for the larger part the nation's investment & where the governments are equipped with a set of more direct and powerful instruments, the bank rate loses much of its significance because bank will affect only a small number of enterprises. Furthermore, a well organised and responsive money market, which is a *sine-qua-non* for the effective functioning of the bank rate, is also absent in most instances. The number of negotiable and credit instruments to be rediscounted is very small. These factors help to suggest the limited efficacy of the bank rate in developing countries. This is the reason why this instrument is not used in such economies as frequently, as is used in some advanced countries like the U.K. and U.S.A. etc.

Open Market Operations

In the broad sense, open market operations refer to the purchase or sale of securities in the market by the Central Bank. The objective is to influence the reserve position of banks which indirectly would bring about relative changes in money rates and credit conditions. The end result is to effect desired adjustment in domestic prices, cost of credit conditions and production. A notable features of open market operations is that regardless of the parties involved, these operations have a direct and positive impact on the volume of bank reserves. It can be applied in desired magnitudes and be quickly reserved. These operations are, therefore, an active reflection of the prevailing monetary philosophy of a country.

The effect of open market operations depends upon a variety of factors, chief among them being the existence of an active and broad money market. This is imperative if the Central Bank wishes to buy or sell securities in appropriate amounts in order to exert the desired effect of bank's reserves. Of course, it hardly needs to be mentioned that the Central Bank should have in its portfolio sufficient volume of securities of various maturity periods for an effective use of this instrument.

In developing countries, money markets are not fully developed. Consequently, open market operations are often used to broaden the securities

markets so as to create an institutional set-up for a more effective use of this instrument. Many of these nations also make the traditional use of this, depending upon the character of their financial institutions.

Variable Reserve Requirements

A change in the variable reserve ratio does not change the total reserve position of the commercial banks. It only affects the amount of excess on secondary reserves. The logical reason for this is the power of the banks to create credit mainly depends upon the excess reserves. Hence, a change in the reserve requirements affect the credit creating capacity of the banks, and, in turn, their power to effect money supply.

A change in the reserve requirements has two-fold effects :

1. Assuming that there is an increase in the reserve requirement, there is an immediate decline in the excess of commercial banks. They find additional funds to meet the larger reserve requirements; which can only be had by reducing the excess reserve on the basis of which credit is created.
2. An increase in requirement, would reduce the rate of multiple expansion of deposits for the entire banking system.

The instrument of variable reserve requirement is generally considered to be Blunt and Clumsy, the reason being that it has technical and psychological limitations. For one thing, it is difficult to use this instrument in moderate doses; even every small change in the rate results in a substantial change in the liquidity position to commercial bank. For another instrument does not take into account the relative strength of the Banks and therefore, affects the smaller banks more severely. Furthermore, there is a difficulty, in managing it too.

Since the change becomes effective on a specific date, a sudden and quick adjustment in the liquidity positions of the banks become essential. This process of adjustment is likely to have undesirable disturbances in the market. For these and other reasons, Central Banks generally use this weapon with moderation and discretion, and that too under special and pressing circumstances.

Selective and Direct Regulations

Overall quantitative controls operate by affecting overall bank reserves and overall credit. Selective controls, by contrast are applied to influence specific sectors of the economy which are most vulnerable. Under this type of regulations, no attempt is made to restrict the general flow of credit; rather restrictions are imposed upon the use of credit in specific sectors regardless of the quantum of credit available for such purposes.

The rationale of selective controls is that, consistent with a general credit situation appropriate to a healthy economic system, credit may be so easy to obtain for some purpose that demand expands unduly in particular directions, or speculative activities are over-activated, endangering the stability of the whole economy.

A further need of selective credit control relates to its use as a supplement to general control. When the latter cannot be expected to act in a specific sector either quickly or effectively to deal with the partial or sectoral inflationary situation, while there is nothing to prevent a Central Bank from using selective controls independently. The experience of various countries show that their effectiveness is considerably enhanced, if used along with general credit controls.

In one form or another, many Central Banks also make use of direct regulations either as an alternative to the quantitative controls or in conjunction with them. Direct action can be very important in countries which have considerable central planning and supervision by Government business.

These controls also assume special importance in situations where the banking system is either non-responsive to Central Bank's appeal or consists of a few large banks which could be easily directed to follow the Central Bank's general policy.

Direct action may take several forms. The Central bank may refuse rediscounting facilities to those banks whose credit policy is inconsistent with the bank's policy. The bank may issue directive to banks generally concerning their lending or investment operations. Direct action can also be taken as a coercive measure on offending bank. Whatever the form, direct action always carry punitive threats for non-compliance and are used primarily to buttress general and selective credit policies.

Moral Suasion

In the wider sense of the term, moral suasion may be treated as one of the milder forms of selective credit control with the important difference that this instrument is not accompanied by statutory compulsion or threats of punitive action.

Moral suasion carries with it the advantages of creating a less unfavourable psychological reaction and a greater response to the appeal of the Central Bank. It is, therefore, easier for the Central bank to secure the willing and active co-operation of the commercial banks in the spirit as well as in the letter.

Another advantage of moral suasion is that this informal method of control can be adopted by the Central Bank for exerting an appropriate influence on non-scheduled banks and also on the other kinds of credit and financial institutions generally considered to be outside the scope on the Central Bank regulation.

Moral suasion can be affectuated in many forms. The Central Bank may call the leading bankers for heart-to-heart talks. An appeal to their nationalistic spirit may be made. A displeasure may be expressed over their non-compliance with law, vague threats concerning future availability of credit may be made, or banks may be warned of direct actions.

FISCAL POLICY : OBJECTIVES AND INSTRUMENTS

- 1.9.1 Introduction
- 1.9.2 Objectives of the lesson
- 1.9.3 Explanation of fiscal policy
- 1.9.4 Fiscal policy and stability
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 - 1.9.7.4 An Appraisal
- 1.9.8 Conclusion
- 1.9.9 Short answer type questions
- 1.9.10 Long answer type questions
- 1.9.11 Recommended Books

1.9.1 Introduction : The word fiscal is derived from the old French word 'Fisc' which means the 'money basket' or the 'treasury'. Thus, fiscal means 'pertaining to treasury' or 'government finance.' Fiscal policy means the Government policy of taxation, expenditure and public debt etc. Fiscal policy may be defined as, "a policy under which the government uses its expenditure and revenue programmes to produce desirable effect & avoid undesirable effect on national income, production and unemployment. It emphasizes the effect of government expenditure and revenue upon total economy and argues that they should be used deliberately and consciously as a balancing factor to secure economic stabilisation." Gerhard Colm defines fiscal policy as, "the conduct of Government expenditures, revenues and debt management in such a way as to take fully into account the effect of these operations on the allocation of resources and the flow of funds, and thereby their influence on the level of income, prices, employment and production."

In the modern government organisation, the amounts of public expenditures, revenues and public debt are so huge, that they begun to assume a major importance in the national economy. The desired fiscal policy can be pursued by budgetary measures like taxation, expenditure, public debt etc.

1.9.2 Objectives of lesson : In this lesson we will study about fiscal policy, what is its role in any economy? How it acts as anti inflammatory policy? What are its main instruments or tools?

1.9.3 Explanation of Fiscal Policy : The role of fiscal policy in regulating the economy and protecting it from the ills of the market mechanism were recognised very slowly. As discussed in an earlier lesson, governments were wedded to the traditional ideals of 'sound' budgetary policy of avoiding deficits. Such a policy, amongst other things, was causing two problems. One was, as Keynes pointed, the fact that an attempt to balance the budget would put it to an unbalance and vice-versa. The second was that through the process of balanced budget multiplier, the budget was adding to the severity of cyclical fluctuations. It was with great difficulty that the appropriateness and usefulness of the fiscal policy in combating the ills of the economy were recognised, especially during the Great Depression of 1930s. It was conceded that the government had a primary responsibility of helping the economy towards stabilisation.

1.9.4 Fiscal Policy and Stability

As mentioned earlier, the role of fiscal policy in promoting economic stability was recognised slowly, and not sufficiently till the Great Depression of 1930s. Actually, as Keynes pointed out, the orthodox sound budgetary policy of avoiding deficits itself contributed towards greater instability and made the task of keeping the budget balanced all the more difficult. This, in fact, generated a "perverse" policy on the part of the authorities, pushing the expenditure and demand in the economy down during a period of depression and pushing them up during a boom.

The development of the concepts of "multiplier" and "accelerator" and the relationship between the macro variables, like investment, income, consumption and savings enabled the economies to visualize more clearly the mechanics of trade cycles and role which fiscal policy could play. This gave rise to the principle of compensatory finance and functional finance. It was realised that through fiscal policy the government could, to a great extent, neutralize the destabilising movements in the economy. The general theoretical framework was that a depression is caused by a deficiency of effective demand. Fiscal policy should remedy it by increasing public expenditure and by encouraging private expenditure. Similarly, during a boom period the need is to control the demand which again can be partly done through curtailing public expenditure and partly through curbing the private expenditure.

To encourage demand during depression, the authorities should reduce the tax rates or abolish taxes on various items & activities. This would push up profits and reduce the price through a reduction in the cost of supply. Lower prices are expected to increase demand, production and employment which, in turn would bring further increase in demand and so on. A similar action can be taken in the field of customs duties also. Raising import duties would divert domestic demand from imports to home produced goods or abolishing export duties or giving export subsidies would increase the demand for export and would contribute towards recovery from depression.

1.9.5 Pump Priming

The stimulation effect of tax reductions on private business outlay may not raise the level of aggregate spending adequately, if public expenditure remains unchanged or does not increase as well. The kind of public spending which is associated with a recovery programme is known as "pump priming" which presupposes that private investment is periodically deficient and, therefore, needs to be stimulated by public investment. This type of public spending stimulates private investment in two respects, i.e., both as a method of financing and as well as method of spending.

During a period of depression, the banks & the general public tend to accumulate idle cash balance rather than assume the risk of investment. If the government borrows from banks and individuals with an excess of cash, which they would not otherwise spend themselves, such borrowing provides an outlet for idle cash balances. By borrowing from the banking system the government enables bank assets & deposit to expand and so create 'new money' to be spent by the economic system. Thus, the very method of financing "pump priming" is conducive to recovery. "Pump priming" as a method of financing, not only facilitates investment by institutional savers, but also supplements monetary policy by stimulating credit expansion and general business recovery.

"Pump priming" stimulates private investment mainly through its magnifying effects on income via the multiplier principle. Once consumption expenditures are enlarged by the initial public outlays, the rest taken care of by operation of the acceleration principle, provided that excess capacity and other offsetting conditions do not exist. The sequence of events leading to recovery is "Pump Priming", increased induced investment and increased total spending.

1.9.6 Compensatory Fiscal Policy

Alongwith secular structural changes in the advanced economies there has occurred a shift of emphasis from the traditional business cycle analysis to the levels of income and employment and a parallel change in policy from monetary policy and "pump priming" to "compensatory" fiscal policy. Business cycle policy

no longer consists of "eliminating" the causes of cyclical disturbances so as to render Government intervention unnecessary, but rather of letting public investment fill the inevitable cyclical and secular gaps created by a deficiency of private spending. Thus, "compensatory" spending is based on the assumption that private capitalism, left to itself, is no longer capable of maintaining aggregate spending at a level compatible with full employment either in the short-run or in the long-run. On the basis of his analysis of persistent tendencies towards under employment equilibrium, Keynes stressed the need for public investment as a balancing factor. This he believed to be a *sine-qua-non* of the continuation of the capitalist system in a new dynamic and stable form. Hansen and others have also emphasized the need for bold long-range programme of public investment for stabilization as well as for welfare reasons. As a matter of fact "Compensatory spending" is an integral part of a general policy of guaranteeing full employment (Britain) etc., or of guiding the national economy along the lines of maximum output, employment and purchasing power (USA).

However, there are some implications of compensatory spending which cast some doubt on the feasibility of large scale, continuous public investment even as a balancing factor. The 'compensatory spending' tends to supplement monetary policy. It is feared that a large and growing public debt incident to compensatory spending will render the traditional monetary controls ineffective as "instruments of control of economic fluctuations". A large and growing public debt has the effect of increasing excess reserve of banks for potential excessive credit expansion on the one hand and of reducing interest rates on the other.

As for lower interest rates, although public investment is undoubtedly facilitated by low interest cost but some types of private investment will be discouraged by the low interest return from investment. It is feared that 'compensatory spending' will eventually require borrowing at a zero rate of interest and wipe out the incentives of wide range of institutions and individuals, depending on fixed income-yielding investments. However, it is concluded that these short-run effects of a long range programme of compensatory spending could perhaps be "dismissed as a part of the necessary costs of a successful monetary policy". Provided that "the low rate of interest did actually achieve an adequate recovery of investment, output, and employment."

1.9.7 Anti-Inflationary Fiscal Policy

Inflation is a result of the aggregate demand for goods and services being in excess of the aggregate supply. Therefore, the obvious fiscal remedy for it is to reduce total demand. As you are aware, inflation is caused either due to an increase in demand or as a result of changes in cost or by both. The change in costs often stem from rise in wages.

1.9.7.1 Government Expenditures

A reduction in the aggregate demand should be the most essential part of an anti-inflationary policy. Since inflation is caused by increasing expenditures, a check on this is the most logical step to be taken. Government expenditure should, therefore, be reduced and its revenue increased to counteract the increase in private spending. There is often a part of the government expenditure which is comparatively non-essential and such expenditure must be reduced. But as substantial part of government expenditure is regarded as very essential and cannot be reduced, as for example, even during the peace time, the expenditure on defence is unavoidable, and it may be difficult for the governments, to prevent the general tendency of defence expenditure from rising. In developing countries, the planned economic development claims a substantial part of public expenditure and any reduction in the same will bring down the tempo of economic growth. Large amounts of expenditure are incurred by public authorities on essential long period social programmes and such expenditure cannot be curtailed. Thus, there is a certain irreducible minimum of expenditure that must be incurred by the government.

No reduction of government expenditure as part of anti-inflationary programme, therefore, appears possible. Inflation cannot be attacked from this side with success.

1.9.7.2 Taxation

Thus, the major attack on an inflationary situation comes from the side of taxation. Increases in the amount of tax revenue decrease the disposable income with the general public and, therefore, have anti-inflationary effects. The large volume of surplus purchasing power that gets into the hands of the people and exerts a pressure on demand, is mopped up by increased taxation. The increased government expenditure is sought to be covered by revenue and is not allowed to create a large budget deficit. New taxes are imposed and the rates of old taxes are raised. Demands for tax relief and abolition of taxes have to be resisted to make an anti-inflationary policy successful.

The taxes to be used for this purpose have, however, to be carefully chosen. Some taxes are more suitable than others and operate more directly on the points which are important in the inflationary economy. Direct taxes have a more direct influence in such a situation. The income tax, especially taxes away from the public in a very progressive manner a part of the purchasing power and, therefore, is a useful tax. An expenditure tax not only taxes away surplus purchasing power from the economy, but also has a discouraging effect on consumption. The Excess Profit Tax is another suitable tax which was tried in many countries during World War II.

Indirect taxation is a good instrument for mopping surplus purchasing power with the general public, for it effects, a large part of the population than direct taxation. In a country like India, where only a few are under the purview of direct

taxation, large majority of people can be reached only through indirect taxes.

1.9.7.3 Public Debt

The effect of large budget deficits which are mainly responsible for inflation can be partly counteracted by covering the deficit by public borrowing. Government borrowing also helps in taking a part of the large amount of purchasing power available to the people and reduces the inflationary pressure. The part of the government debt help by non-banking investors indicates that so much less purchasing power is used by people for buying commodities. However, it must be clearly understood that it is only government borrowing from non-banking investors that has a disinflationary effect. Public borrowing reduces total demand only when it has a restrictive influence on private consumption and investment.

1.9.7.4 An Appraisal

Fiscal measures are not wholly successful in preventing inflation in times of war or in period of rapid economic development, as has been observed, large government spending is inevitable in such condition and a certain amount of deficit financing has to be done. In times of war, the production of commodities for consumption has to be drastically cut and in a developing economy, the investment takes time to mature. Therefore, the creation of money-income is always ahead of the availability of goods and services. Thus, the reduction of demand through control of public expenditure has very limited scope.

Increasing taxation and borrowing have also their limitations. The effects of high taxation on production have to be guarded against and loans from the general public cannot give all the funds required for the government spending. A carefully devised tax structure and cautiously regulated rates are helpful in restraining inflationary pressure. But the total effect of all these measures is to moderate the pressure, not to eliminate them completely.

1.9.8 Conclusion : It may, therefore, be concluded that fiscal policy by itself cannot do all that is required in controlling an inflationary situation. Other kinds of measures such as monetary control, price control and rationing are more effective. Fiscal devices are more efficient as support to other policies than as independent devices, during inflation.

1.9.9 Short answer type questions

Write short notes on the following :

1. Fiscal policy
2. Anti inflammatory fiscal policy
3. Public debt
4. Taxes and economic stability

1.9.10 Long answer type questions :

1. Why there is need of fiscal policy? What are its instruments?
2. How fiscal policy is helpful in economic stability?
3. Explain how fiscal policy acts as anti-inflamatory policy.
4. Explain the role of fiscal policy in any economy.

1.9.11 SUGGESTED BOOKS

1. Gupta, R.D. : Keynesian and post-Keynesian Economics.
2. Dernburg & Mc Dougal : Macro Economics.
3. Makin John H. : Macro Economics.
4. A.C. Pigou : Public Finance, Part III, Chap I to VI.
5. Raja J. Chelliah : Fiscal Policy in Underdeveloped Countries, Chapter I.

SHORT ANSWER TYPE QUESTIONS

1. Define Inflation.
2. What do you mean by open inflation ?
3. What do you mean by credit inflation.
4. What is periodicity in trade cycles ?
5. Define monetary policy.
6. What is bank rate ?
7. What is anti-inflationary fiscal policy ?

LONG ANSWER TYPE QUESTIONS

1. Define inflation ? How is it caused ? What are the remedial measures which can help to fight inflation ?
2. What are business cycles ? What are their causes ? What are the measures to check the operation of business cycles ?
3. 'Multiplier-accelerator interaction explain cyclical business fluctuations in the economy'. Comment.
4. Define monetary policy and differentiate it from other economic policies.
5. Explain in detail the objectives of monetary policy in a developing country like India.
6. Describe briefly how fiscal policy can be used to achieve full employment ? Bring out its limitations.
7. Describe how fiscal policy can be used to influence the level of business activity in a country ?

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