are kept in specially constructed strong rooms, and the bank act as a bailee of the goods entrusted to its keeping.

(b) *Issue of personal and commercial letters of credit.*—These enable the customer to profit by the superior credit of the bank. Thus, money can be promptly paid out to a customer or to his agent, and bills drawn by his creditor can be accepted by the bank or any of its branches, agencies or correspondents.

(c) *Underwriting loans.*—It is not uncommon for joint-stock banks to act as bankers to some local authority or other public body and sometimes to manage and issue a loan on their behalf or, as in England, even for foreign government. In Germany, before the second world war, many banks were often members of stock exchange and acted as investment bankers underwriting the issues of stocks and bonds. Banks in India, often act as bankers to local and municipal authorities or other public bodies, companies and corporations.

(d) *Collection and distribution of information.*—Many of the big banks possess a separate information and statistical department which collects information relating to trade and business and statistics from the bank's various branches and agencies, both at home and abroad. Such information is placed for the benefit of customers and commercial community.

CREDIT CREATION

Money as a medium of exchange includes in its wider sense, not only currency notes and coins which are legal tender, but also bank deposits which are transferred from one individual to another by way of the 'cheque'. In a modern economy, with a well developed banking system, bank deposits form the larger part of the circulating medium. The volume of bank deposits, the rate at which they are created, the rate at which they are circulated have an important effect on the level of prices, economic activity, employment and income in the economy. The importance of banks would not have been so great as at present, if their

work ended with the collection and mobilisation of the savings of individuals. But, as it is, "*the banks are not only purveyors of money, but also manufacturers of money.*" They have the ability to manufacture or create money. This ability of the banks to manufacture money makes them economically all the more significant, since changes in the level of their activity, affect the general level of prices and economic acitivity.

Process of credit creation :

Money is said to be created when the lending activity of the banks leads to a net increase in the total supply of money or purchasing power within the economy. Similarly, money is said to be destroyed when there is decrease in the total supply of money or purchasing power within the economy when the loans are repaid by the borrowers and the additional credit created by the banks is being wiped out. Thus, the lending of a loan by the bank in the form of deposits leads to the creation of money and the repayment of the loan leads to its destruction. It should be remembered that in this context 'money' is taken to mean 'bank money' or 'bank deposits' or credit and not legal tender money or currency.

The power of commercial banks to expand deposits through expanding their loans and advances is known as *credit creation.* At one time it was considered that the commercial banks cannot create credit, i.e., the banks could never lend more than the amount which had been entrusted to them by depositors. For example, if a person deposited Rs. 10,000 with a bank, the latter could lend up to Rs. 10,000 and not more. In fact, it should lend far less since it has to maintain a small margin of cash reserves against the withdrawal of money by the depositors. It is true that a bank cannot lend more than what it has got. But it is also true that what is lent out by a bank may come back to the bank by way of new deposits which may again be lent out, and so on. Thus, a deposit can become the basis for loan or investment, which again by returning to the bank as fresh deposit becomes the basis for new loan and so on. Thus, the banks can multiply loan and investment and thus multiply deposits. *Loans create deposits*

and deposits create loans. Credit creation can be defined as the expansion of bank deposits through the process of more loans and advances and investments.

Illustration :

Let us explain this credit creation by an illustration.

Suppose there are a number of banks, X, Y, Z, etc., each with different sets of depositors and every bank is expected to keep 20% of cash reserves, according to law.

Suppose to start with, a new deposit of Rs. 1,000 has been made with Bank X. After the new deposit, the balance sheet of Bank X will show the transaction, as below : (Only new transaction taken into account)

Balance Sheet of Bank X

Liabilities		*Assets*	
	Rs.		Rs.
New Deposit	1,000	New Cash	1 000
Total	1,000	Total	1.000

The bank has to keep only 20% reserve, i.e., Rs. 200 against the new deposit and the balance of Rs. 800 can be profitably lent. Suppose the bank lends this Rs. 800 to Mr. P who may use the money to pay off his creditors. After the loan is made the balance sheet of Bank X, will show the transaction as under :

Balance sheet of Bank X

Liabilities		*Assets*	
	Rs.		Rs.
Deposit	1,000	Cash	200
		Loan to Mr. P.	800
Total	1.000	Total	1.000

Now the creditors of Mr. P. who got Rs. 800, may be assumed to deposit this amount with their Bank, *viz.*, Bank Y and consequently the balance sheet of Bank Y will be shown as under :

Balance sheet of Bank Y

Liabilities		*Assets*	
	Rs.		Rs.
Deposit	800	Cash	800
Total	800	Total	800

Now, the Bank Y, after keeping 20% reserve, i.e., Rs. 160, will buy Rs. 640 worth bills and after transaction, the Balance sheet will be as follows :

Balance Sheet of Bank Y

Liabilities	Rs.	*Assets*	Rs.
Deposit	800	Cash	160
		Bills	640
Total	800	Total	800

Now, the sellers of bills who received Rs. 640 from the Bank Y would be depositing the amount in their bank and this Rs. 640 will be the new deposit for Bank Z which will lend Rs. 512 keeping Rs. 128 as 20% reserve. Thus, the process will continue till the entire amount gets exhausted.

Rs. 1000 as initial deposit has created a new deposit of Rs. 800 which in turn created another deposit of Rs. 640 which in turn created a deposit of Rs. 512 and so on. Thus, Rs. 1,000 becomes additional deposits of Rs. 800, 640, 512, 410, 328, etc., and if we add all these deposits, the total will be Rs. 4,999.99 or nearly Rs. 5,000. This is the process of deposit multiplication through the process of credit creation.

Deposit Multiplier formula :

As credit creation depends upon the ratio of cash reserves to deposits, the deposit multiplier is:

$$K = \frac{1}{r}$$

Where K = the deposit multiplier; r = ratio of cash reserve to deposits. If cash reserve ratio is 20% or 0.2, the deposit multiplier is :

$$K = \frac{1}{r} = \frac{1}{0.2} = 5$$

From this, we can understaod that the value of the multiplier will be larger if the ratio of cash reserve to deposit is smaller. If the Central Bank insists on larger cash reserve to deposits of commercial bank, then the process of credit creation will be impeded.

Limitations of credit creation :

There are many factors on which the volume of credit creation depends. The first important factor is the *amount of cash* which commercial banks possess. The banks have to redeem their demand deposits in coins and currency notes. The larger the amount of cash with the banking system, the larger will be the credit creation. Crowther says: "The bank's cash is the lever with which the whole gigantic system is manipulated."

Secondly, *the ratio of cash reserves to deposits* is another important factor on which the volume of credit creation depends. Higher the percentage of cash reserve ratio to be kept, the smaller will be the volume of credit creation.

Thirdly, the volume of credit will depend upon the amount of cash with the banking system. This will in turn depend upon *the desire of general public to hold cash.* If for any reason, they decide to have more cash (assuming the total amount of currency notes and coins to be constant) the banks will be left with smaller amount of cash and thus credit creation will be smaller. In fact, large expansion of deposits will add to the total amount of money supply in the country and this will be accompanied by an increased volume of business, rising prices, wages, retail trade and so on. The depositors will like to keep more cash in the form of coins and currency notes. This will mean reduction in the volume of cash reserves with the banks.

Fourthly, credit creation will depend upon the nature of business conditions. Generally, during boom period credit creation will be larger and during depression it will be smaller.

Fifthly, there may be a difference between the maximum potential credit expansion and the actual expansion because of certain leakages in credit creation. These leakages have been omitted in the illustration of credit expansion given above. The important leakages are: (a) The banks may not be able to make loans and investments exactly according to surplus funds available. Any short investment is a leakage. (b) The amounts of advances made by the banks have been assumed to return to them by way of new deposits. But they may not, as the public may wish to hold some cash with themselves. Again, therefore, the new deposits at every stage may not be by the full amount of the loans made earlier. Credit creation therefore will be limited again.

Lastly, the extent of credit creation largely depends upon the *monetary policy* of the Central Bank of the country. The Central Bank has the power to influence the volume of money in the country and it can directly or indirectly influence the banks to expand or contract credit.

Thus, bank deposits in modern communities form the predominant type of money and hence expansion of bank deposits will mean expansion of money supply and contraction means contraction of money supply.

Generally, in these countries, economic growth will be slow (in ...
of lack of financial resources. Hence, the Central Banks should ...
solve the problems of financial stringency through planned ...
expansion.

In the case of India, the Reserve Bank has specific objectives ...
controlling credit. They are: (i) to mitigate the severity of the ... inflationary spiral by mopping up liquid resources to the maximum ... (ii) to be *discriminatory* in ensuring the legitimate credit requirements ... of trade and industry for development purposes and assist the growth ... the economy. In order to realise these objectives, the Reserve Bank of India takes care to regulate the quantity of credit available in the economy ... and the purpose for which credit is extended and also the cost of credit.

Credit control is the primary mechanism available to the Central banks to realise the objectives of monetary management. The Reserve Bank of India is much better placed than many of the Central banks in the matter of availability of powers of credit control. The statutory basis for the control of the credit system by the Reserve Bank is embodied in the Reserve Bank of India Act, 1934 and the Banking Regulation Act, 1949. The former Act confers traditional powers of general credit control while the latter Act provides special powers of direct regulation of the operations of commercial banks and Co-operative banks.

METHODS OF CREDIT CONTROL

In order to regulate the credit, the Reserve Bank of India makes use of the well known weapons which can be classified into:

(*i*) General or quantitative credit control measures; and (ii) Selective or qualitative credit control measures.

The measures undertaken under the former category are: (a) bank rate policy; (b) open market operations; and (c) variable cash reserve ratio. These are called 'general methods' because the effects of these operations would affect the whole economy indiscriminately and even the productive investments would be hit hard whenever contraction of credit is exercised under general methods. It is a method to control quantum of credit in general throughout the economy rather than its use and hence it is called general or quantitative control of credit.

The latter category is called qualitative or selective control of credit by which care is taken to see that the productive sectors of the economy are not adversely affected by the curtailment of credit and they are assured of credit in the interest of economic growth, while flow of funds to unproductive investments will be curtailed and diverted to productive investments. The measures adopted under qualitative or selective control are: (i) directives; and (ii) moral suasion.

I. General Method (Quantitative)

1. Bank Rate Policy

The bank rate is the rate of discount at which the central bank will discount the first class bills or will advance loans to commercial banks. Bank rate is the minimum rate at which the central bank of a country is prepared to discount first class bills of exchange or will advance loans against approved securities to commercial banks or member banks. In some countries, it is also known as *Discount Rate*. Bank rate is the rate of discount, but a market rate is the rate of discount which prevails in the money market.

The bank rate is defined as "the varying of terms and of the conditions in the broadest sense, under which the market may have temporary access to the Central bank through discount of selected short-term assets or through secured advances." In a narrower sense, it is the "minimum official rate at which the central bank, as a bank of discount rediscounts first class bills of exchange brought to it by the discount houses and commercial banks".

Thus, the bank rate policy of reserve bank regulates the bank credit by affecting the cost and availability of credit. The cost is affected by varying the rate of discount. If a bank rate is raised (*i.e.*, rate of discount), the cost of obtaining credit goes up and if the bank rate is lowered, the cost of obtaining credit comes down. So, by making the cost of credit dearer or cheaper, the Reserve Bank tries to influence the demand for credit. At the same time, the availability of credit will also be restricted or regulated by imposing conditions of credit. By prescribing stringent eligibility rules (securities it accepts for granting loans), the Reserve Bank makes borrowing difficult for the commercial banks. By adopting lenient rules of eligibility, it can also make borrowing easy. Thus, the Reserve Bank with the help of the bank rate tries to influence the cost of credit and availability of credit and thereby regulate borrowing.

Requirements for successful operation of bank-rate policy

For the effective operation of the bank rate policy, DeKock has mentioned the following necessary conditions:

(i) There should be a high degree of sensitiveness of other money rates to variations in the bank rate.

(ii) The economic structure of the country must be elastic such that changes in monetary and credit conditions are promptly reflected in the changes in wages, costs, prices, production and employment.

(iii) The steady flow of international capital is unlikely to be impeded by arbitrary and artificial restraints.

Given these conditions, the variations in bank rate will have a impact upon the credit situation of the country in particular and all economic conditions in general.

Limitations of Bank Rate policy

1. If the commercial banks do not come to the central bank bank rate policy cannot be effective.
2. If the gap between the rate of interest and the discount rate increasing, then a change in the discount rate cannot make desired adjustment.
3. Non-bank financial intermediaries may not be affected by change in the bank rate.
4. Whenever a bank rate is raised, the liability of the government is also increased.
5. In an unorganised money market, a change in the bank rate will not change the money market rate.
6. The bank rate policy cannot properly work due to the underdeveloped nature of money market, and also due to the rigidities in the structure of the economic system.
7. Bank rate policy cannot be effective if the commercial banks have surplus cash with them.
8. Investment is not always influenced by a change in the bank rate.

The effectiveness of bank rate policy as a weapon of credit control depends on the importance of the Central bank as the source of borrowing and the extent to which the commercial banks approach the central bank for funds through the rediscounting of approved bills.

In this respect, the bank rate policy of the Reserve Bank of India was not very effective for a long time since its establishment in 1935 as commercial banks had little recourse to it for getting funds. It should be remembered that the Reserve Bank makes use of the bank rate policy as an instrument of credit control not in isolation but with the combination of other methods as well, to make it effective and successful.

Causes for failure of bank rate policy in India

In India, the bank rate policy has not been very successful due to the following reasons:

(a) The Indian money market is characterised by its dichotomy into the modern banking system and the indigenous banking system which could not be effectively controlled by the Reserve Bank.

(b) The banking system and the banking habit have poorly developed and as such the bank rate policy is ineffective since it can influence only on bank credit.

(c) The non-availability of eligible short term assets for rediscount in sufficient volume renders the bank-rate policy ineffective.

(d) The predominance of currency over credit and the habit of keeping surplus cash reserves over and above the minimum legal requirements by the commercial banks reduce the need for seeking financial assistance of the Reserve Bank.

2. Open Market operations

Another method of credit control by the Central bank of the country is what is called 'Open market Operations' which means buying and selling of securities by the Central bank. In a narrow sense, the term Open Market Operations means the sale or purchase of government papers like government bonds and treasury bills, etc., by the Central bank as a deliberate measure to exercise control over the availability of credit and the liquidity position of commercial banks. In a broad sense, however, it means the purchase or sale of any papers like the government securities, or any other public securities or trade bills. The Reserve Bank of India Act empowers the Reserve Bank " to purchase and sell securities of the Government of India, of various State Governments of any maturity and such securities of local authority as may be specified in this behalf by the Central Government on the recommendations of its Central Board." The open market operations lead to an increase or decrease in the volume of cash reserves of commercial banks when they buy or sell securities offered in the open market. This exchange affects the total volume of credit created by the banking system.

Objectives of the Open Market Operations

1. Whenever there is a shortage of money, the Central Bank can purchase securities in the open market so that more money can be injected into the economy. This is undertaken to remove the shortage of money in the money market.

2. Open market operations can eliminate the effects of export and import of gold. In the case of import of gold into a country, the domestic price level increases. If this has to be checked, the Central bank can sell the securities and mop up the extra purchasing power. Similarly, in the case of a gold-exporting country, the price level decreases. If this has to be checked, the Central bank can purchase the securities in the market and can increase the price level.

3. This method helps to check the export of capital from a country. If a country is engaged in the export of capital, which is not in the interest of the country, capital flight can be checked by selling securities in the market by the Central bank.

4. This method helps to strengthen the bank rate policy. If the commercial banks do not change the rate of interest, as a consequence of change in the bank rate, open market operations can be undertaken to supplement it. For example, if the commercial banks do not increase the rate of interest after the bank rate is raised, the Central bank can reduce the cash reserves of commercial banks by selling securities in the market. In this way, the commercial banks would be compelled to increase the rate of interest.

5. Open market operations can check the run on the banks. Whenever the rumour spreads of a bank failure, naturally, a dangerous situation may emerge. In order to save the banks from such a situation (shortage of liquidity), the Central bank can purchase the securities from the market. This gives enough money in the hands of the bank so that the situation like the run on the bank can be saved.

6. Through open market operations, the central bank can stabilise the market for government securities from time to time whenever necessary.

The Theory of Open Market Operations

When the securities are sold, they are purchased by the commercial banks and private individuals. Therefore, money supply is reduced in the economy. Open market selling of securities is done during a period of inflation so that the extra purchasing power can be mopped up. When the securities are purchased, money goes to the commercial banks and the customers. Thus, money supply is increased in the economy. This is done during a period of depression. Credit is contracted by the selling of securities, and credit is expanded by the purchase of securities and accordingly, the market rate is changed as a consequence.

Limitations of Open Market Operations

The effectiveness of the open market operations is contingent upon a number of conditions. Unless these conditions are fulfilled, the open market operations are unlikely to achieve the desired ends.

1. The Central Bank's open market operations are based upon the assumption that an increase in the cash reserves of commercial banks as a result of the purchase of securities will result in credit expansion and similarly the sale of securities through reducing cash reserves of commercial bank, will bring about a contraction of credit exactly by an extent desired by the Central Bank. But in reality, the increase in cash

reserves, subsequent to open market operations, may be offset by the withdrawal of notes for increased currency requirements, or for hoarding purposes or by a net unfavourable balance of payment or by an outflow of gold. Similarly, the off-setting forces may operate, when the Central bank attempts to restrict credit through the sale of securities. Even if the open market operations do affect the cash reserves, it is not certain that they will change by an extent adequate to enable Central bank to achieve its objects. Thus, the impact of off-setting forces may nullify the effect of open market operations.

2. Secondly, the attitude of commercial banks towards credit variations may stand limiting the objective of open market operations. Even if the cash reserves increase or decrease to a desired extent, due to open market operations, there may not come about upto a desired limit. During a period of slump the purchase of securities by the central bank may fail to induce the commercial banks to extend their loan operations. The commercial banks being the custodians of public deposits, do not like to involve themselves in avoidable risks. As a result, the banks choose to operate with excessive cash reserves, rather than expand credit operations. Moreover, during depression, the pessimistic outlook for the future prevents the prospective or existing entrepreneurs from securing advances from banks despite very low lending rates. During boom, on the other hand, the over-optimism on the part of business community does not completely restrict borrowing, even though the interest rates are high. For the commercial banks, credit contraction is easier than credit expansion. Thus, the open market operations can stop booms, but it cannot prevent slumps.

3. The success of open market operations rests on the assumption that the demand for credit is highly sensitive to the changes in interest rates. As a matter of fact, the demand for credit is relatively less interest-elastic. The entrepreneurs are induced to secure more or less credit from the banking system by the consideration of profits rather than the lending rates. During a period of slack business activities, the investors are in so low spirits that they are not inclined to contract borrowings in spite of very low lending rates. In this connection, Crowther observes that the Central Banking authorities can put more water before the public horse, but cannot force it to drink.

4. Inadequacy of securities stands as a limitation of open market operations. The current supply of eligible securities with the central bank poses as a limitation upon the capability of the Central Bank to influence the conditions in money markets. If the central bank has got

a stock of securities insufficient to offset the accumulation of cash reserves by the commercial banks during contraction, the open market operations will prove miserably inadequate to initiate the expansion.

5. A further limitation on the open market operations is imposed by the disturbing effect of such operations in countries which have poorly developed banking system. Large sales by the Central bank depress the security prices and deplete severely the assets of both Central bank and commercial banks and have a very unsettling effect upon the borrowing programmes of the government. The considerations like this, restrict greatly the capacity of Central bank to control credit in an effective way.

Comparison between Bank Rate and Open Market Operations

a. Open market operation is a more direct method of credit control, whereas bank rate is an indirect method. Bank rate depends on commercial banks; on the other hand, open market operations depend on the monetary authority.

b. Bank rate directly affects the short-term rate of interest. The long-term rate of interest is affected only indirectly. The open market operation affects the prices of long term securities, and therefore long-term rate of interest. Open market operations directly influence money supply, credit and rate of interest.

c. Open market operations can really achieve little by itself. It is used to supplement the bank rate. However, Keynes maintains that extensive open market operations serve the purpose without a discount rate policy.

d. Open market operations has been found to work successfully, without the help of bank rate policy. But a bank rate policy can hardly work successfully without the help of open market operations.

e. Open market operations can be used very frequently without any harm; but, this is not the case with the bank rate. Frequent variations in bank rate is neither possible nor desirable.

Thus, it is found that open market operation is superior to bank rate. But for achieving the ideal result, both the instruments must be used simultaneously. If credit is to be restricted, bank rate has to be raised and at the same time, there should be selling of securities. Similarly, if credit is to be expanded, bank rate can be lowered and securities can be purchased. Thus, the efficiency of these two instruments of credit control is interrelated.

In India, open market operations have little significance as we do not have well-developed market in securities like United States and United Kingdom. Mostly, the operations are done in Government bonds rather

than in treasury bills due to the absence of a well-developed treasury bill market in the country. Further, dealing in Government securities has become rather 'one-way, *i.e.*, there has been more selling of Government securities to reduce the budgetary deficits and the capacity to absorb these securities flowing from the Reserve Bank pool is much limited.

With the limitations, the Reserve Bank adopts this measure to make the bank rate policy more effective; to relieve seasonal stringency in the money market; and to create cheap money conditions to make the flotation of Government loans successful.

3. Variable Reserve Ratio or Cash Reserve Ratio

This is another method of credit control applied by the Central Bank to an organised money market. Commercial banks keep cash reserve with the central bank. This reserve is maintained for the purpose of liquidity and also for providing the means for credit control. The cash reserve that is to be maintained with the central bank is called *Minimum legal Reserve Requirement*. This is done on the basis of central banking rule. The minimum reserve ratio which is a percentage can be changed legally by the Central Bank. This reserve ratio is, therefore variable.

The variations in reserve requirements are the most drastic tools in the kit of Central banks. It should be noted that when credit expansion is desired, variable reserve ratio is reduced and when credit creation is to be reduced, VRR is raised. Thus, by varying the reserve ratio, the lending capacity of commercial banks can be effected. This method affects the volume of cash reserves with the commercial banks and therefore, it affects the credit-creation multiplier of commercial banks. VRR is raised during the period of inflation to reduce the credit-creating power of commercial banks. VRR is reduced during the period of depression so that commercial banks can create more credit for the economy.

Superiority of VRR to Open Market Operations

Variable reserve ratio is a more direct and prompt method of credit control. It can achieve the desired result almost immediately. This reduces the time lag, whereas open market operations involve time lag and delay. Secondly, open market operations cannot be practised in a narrow security market. But VRR has no such limitation. Thirdly, in the case of open market operations, large-scale transactions may cause loss to the government and Central bank. The VRR may get the same result, but without any fear of loss. The VRR does not require any security. It also does not increase or decrease the supply of earning assets. Fourthly, VRR simultaneously affects all the banks, but open market operation affects only those banks which deal in securities.

Limitations of Variable Reserve Ratio

1. The method of variable reserve ratio is discriminatory in nature. It affects the credit creation capacity of big and small banks in the same way. Banks with excessive cash reserves are not adversely affected, while banks with smaller cash reserves are severely hit by it. This method thus is inequitous and causes greater hardships for small banks.

2. The variable reserve ratio policy can be of little use when the banking institutions possess excessive cash reserves. Under such conditions, an increase in the reserve ratio will not check the credit expansion activities of the commercial banks.

3. The effectiveness of this device may be only marginal because the cash reserves alone are not the only basis for the lending operations of banks. They may determine their lending policies on the basis of the ratios of total advances to deposits or on the strength of foreign funds.

4. The reliance upon this device of credit control, in a way, presumes that the credit-creation by banks is determined exclusively by the supply of money and credit. Unless the demand for credit alters in the way desired by the Central Bank, the variations in reserves may prove to be an exercise in futility. During depression, when the demand for credit is low due to dull business conditions, no amount of reduction in reserve ratio can revive the demand for credit. Similarly, during prosperity, the prospects of large profits exert so strong an influence upon the demand for credit that the latter is difficult to be curbed, despite drastic restraints on bank reserves.

5. This device is clearly inappropriate when only minor adjustments in the supply of credit are required, since it is capable of creating very sizable variations in the volume of credit. It should therefore, be employed only in such circumstances in which larger variations in credit situation are to be made.

6. This device will have a disturbing impact upon the security market of the country. If the Central bank, with a view to restrict credit, decides to raise the reserve ratio, the commercial banks may be forced to dispose of their holdings of securities in order to maintain that ratio. This selling activity may cause a decline in security prices.

7. This method may have adverse effects both upon the liquidity position and the profitability of the commercial banks.

8. This method cannot be regarded as a dependable anti-cyclical instrument. This device can be useful only to counteract important gold inflows and outflows, or in an economic system where central bank holdings of government securities are very small.

In view of the several shortcomings of this device, Milton Friedman, an eminent authority on monetary theory categorically asserted that "variable reserve requirements are a technically defective instrument for controlling the stock of money and should be eliminated."[1]

Reserve Bank of India and Variable Reserve Ratio; and Liquidity Ratio

According to the Reserve Bank of India Act, the commercial banks are required to keep with the Reserve Bank a minimum cash reserve of 5 per cent of their total demand liabilities (demand deposits) and 2 per cent of their total time liabilities (time deposits). According to the amendment of the Act, the minimum statutory reserve ratio could be changed by the Reserve Bank of India and it was empowered to raise the reserve ratio upto 20 per cent in the case of time deposits. By the Reserve Bank Amendment Act and Banking Companies Amendment Act of 1962 this double ratio system was replaced by a single and simple ratio of 3 per cent against the total time and demand deposits taken together and Reserve Bank was given powers to vary this upto 15 per cent. In December 1995, this was kept at 14 per cent.

The Reserve Bank of India made use of this weapon for the first time in March 1960 to curb expansion of credit. All scheduled banks were required to keep with the Reserve Bank additional balance equal to 25 per cent of the increase in their demand and time deposits over and above the minimum requirement of 5 per cent and 2 per cent. This was subsequently revised in May 1960.

In September 1964, by amendment of the Reserve Bank Act, the banks were required to maintain a minimum amount of liquid assets of not less than 25 per cent of their liabilities. (Liquid assets include till money, gold, approved securities and balance with the State Banks of India and other notified banks). In 1965, this *liquidity ratio* was raised to 30 per cent.

Using the powers extended by the amendment of the Act, the RBI raised the Statutory Liquidity Ratio to 32 per cent in 1973 and to 34 per cent in 1974. Since the economy was under tremendous inflationary pressure, the SLR was raised to 38.5 per cent and it was maintained till March 31,1992. The Narashiman Committee did not favour maintenance of a high S.L.R. According to the Committee, the S.L.R had become an instrument in the hands of the Government to mobilise larger resources to support the Central and States budgets. On the basis of recommendations of Narashiman Committee, the Government decided

1. Friedman, M : *A Program for Monetary Stability* (1959) p.47

to reduce the S.L.R in stages over a three-year period from 38.5 Pe
cent to 25 per cent. This downward adjustment was made from
1993-94 onwards to 25 per cent in 1996-97.

4. Slab system of Lending

In September 1960, the Reserve Bank introduced slab system of lending by which every scheduled bank was assigned a quota (depending on its own reserves with RBI) for borrowing in a quarter. Normally, the quota was fixed at 50 per cent of their statutory deposits and if the banks exceeded this quota, the excess funds were subjected to 1 per cent additional interest; if borrowing exceeded 200 per cent of the basic quota, the borrowing bank had to pay 2 per cent more over the bank-rate for the excess amount. Though this system was criticised as increasing the bank rate through the back-door, it had checked the borrowing propensity of the banks which was the ultimate aim. This slab system was abolished in 1964 when the bank-rate was raised to 5 per cent. Instead a differential rate system was introduced by which the borrowing bank should pay a progressively higher rate for its borrowing, the rate depending on the extent to which the liquidity of the bank had been affected due to borrowing. By these methods, the Reserve Bank tries to check indiscriminate lending by the commercial banks, unmindful of their liquidity position to earn more profits.

II. Selective Method (Qualitative)

Apart form the above mentioned methods of credit control, the Central banks may take up selective or qualitative credit control with the ultimate aim of touching some specific sensitive spots of the economy. This is mainly intended to control certain selected fields of credit activities.

The main objective of selective control of credit is to curtail the volume of credit flowing into unproductive channels and diverting them into productive channels of the economy. For a developing economy like India, the method is very significant as the economy requires very judicious use of resources. The country requires enormous development credit in its planning programme which should be made available for quick capital formation and growth. At the same time, availability of too much credit in the economy will lead to harmful effects like inflationary trends, rise in prices and instability. A blanket control of credit will not deliver goods. So the general method or the quantitative method will not be suitable for a developing economy. For instance, excessive consumer expenditure on consumer goods through instalment credit will tend to push up the prices of consumer goods which will affect the general price level. This is a spot where control of credit has

to be exercised in the interest of price stability. Suppose the country is in acute deficits in balance of payments which has to be made good through exports, then credit should be diverted to export production. Only through selective method, in developing countries, the flow of credit to undesirable speculative fields can be prevented.

The Banking Regulation Act, 1949, empowers the Reserve Bank of India to make use of selective measures to control credit. This can be done either independently or in combination with the general method. According to Section 36 *(i)* of the Banking Regulation Act 1949 the Reserve Bank of India *can caution or prohibit banking companies generally or any banking company in particular against entering into any particular transaction or class of transactions and generally give advice to any banking company*. On this basis the Reserve Bank can issue directives to the scheduled banks in their lending operations.

A. Directives

Under selective method or qualitative method of credit control, *Directives* form a more drastic and punitive weapon to restrain credit expansion. Under this device, the Central bank issues directives to such banks whose lending policies are in contravention of the general credit policy of the Central bank or in case of whom the borrowings from the central Bank are rather excessive. The directives may assume any of the following forms:

(a) The Central Bank may refuse the rediscounting facilities for those banks, the credit policy of whom, does not conform with the monetary policy of the Central bank. This method was employed by the Federal Reserve System in the United States during 1929-33 slump.

(b) The Central bank may impose upon defaulting banks a penal rate of interest over and above the bank rate.

(c) The Central bank may refuse to grant further financial accommodation to banks whose borrowings are in excess of their capital and reserves.

(d) The Central bank may issue directives restraining them from excessive lending against the pledge of securities of certain specific types.

Limitations or Drawbacks of Directives

Though this method is highly effective, it suffers from inherent drawbacks: (i) This method has tinge of coercion and vitiates the atmosphere of co-operation and goodwill between the commercial banks

and the apex credit institution. (ii) It is not always possible for the commercial banks to make a clear distinction between proper and improper; essential and non-essential and productive and unproductive uses of credit. Thus, it is very difficult for banks to have a complete control over the ultimate use of credit. (iii) The method of issuing *directives* on pain of penalty and refusing to extend financial accommodation to commercial banks by the Reserve Bank or any Central bank is inconsistent with the function of the central bank as the *Lender of Last Resort*. The commercial banks, whenever pressed hard by financial stringency have to approach the Central bank for accommodation. The refusal by Central bank to extend credit is clearly not in conformity with its function as the lender of the last resort.

Directives of the Reserve Bank of India

The Reserve Bank of India made use of this method for the first time in 1956 when it felt that the bank credit in 1955-56 was being misused for speculative purposes. It directed the banks to furnish fortnightly returns of their advances against the securities to keep watch over their lending activities. Again it issued a number of directives to the banks to restrict advances when hoarding of foodgrains became prevalent. The Reserve Bank issued directives to check advances against paddy, rice, gram, pulses etc., to check hoarding. It also issued directives raising the 'margin requirements' for giving advances. Later on, these directives were extended to other essential commodities. When supply situation of essential goods became normal, these rigorous directives of lending were withdrawn. Thus, whenever required, the RBI tries to curb the inflationary symptoms appearing in certain vulnerable spots of the economy.

B. Moral Suasion

In addition to the various statutory methods, the Central bank of the country may issue circulars of suggestive and recommendatory nature and persuade the banks to meet the financial situations. Normally, banks accept these recommendations. By making appeals to the banks, the RBI enlists co-operation of them in making its effort in credit control successful. The RBI places before the member banks the prevailing credit situation in particular, and economic conditions in general and suggests to them the most desirable course of action which they are expected to follow in the prevailing circumstances. This method involves no coercion and as such it is unlikely to produce any adverse psychological effect upon the banking community. In addition, the scope of this device is relatively wide and brings into its fold the institutions

like indigenous bankers and other financial houses which otherwise remain beyond the control of the Central bank. This method has been employed successfully in large number of countries including England, France, Sweden, Canada, Australia, New Zealand and India, where the financial and moral leadership of Central bank is strongly established.

The success of this device depends upon the strength of Central bank and the prestige it commands among the member banks. If the position of Central bank is rather weak and the commercial banks have not to count upon the financial accommodation from the former, moral suasion will not yield desired results.

Figure 11.1 illustrates various methods of credit control.

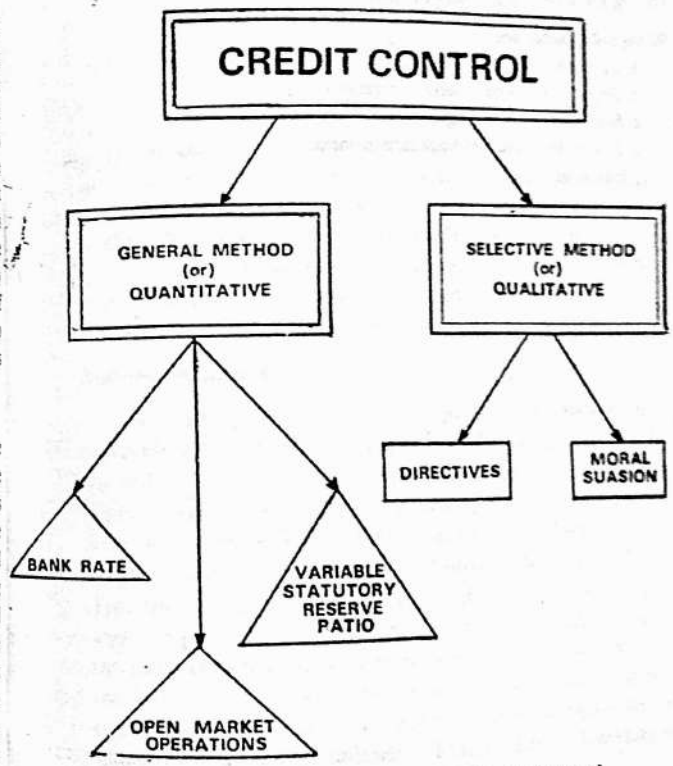

Figure 11.1 Various methods of Credit Control

CHAPTER 13

Monetary Policy

The term 'Monetary Policy' can be defined in a broader sense, as well as in a narrower sense. In a broader sense it refers to the measures taken by the monetary authorities with a view to producing a deliberate impact on the nature and volume of money so as to achieve the objectives of general economic policy. It aims at regulating the flow of currency, credit and other monetary substitutes in an economy with a view to affect the total stock of such assets as well as to influence the demand of the community for such assets. In other words, *the monetary policy is used as an instrument to achieve certain economic aims outside the monetary system.* In this sense, the monetary policy does not constitute an end in itself, but rather a means to an end.

In a narrower sense, monetary policy refers to steps taken by the government and the banking authorities to manage the money and credit supplies including the steps taken from time to time to control and regulate the interest rates. Non-monetary measures having a bearing on the monetary situation may not find a direct place in a monetary policy defined in a narrow sense.

The monetary policy of the country is formulated by the government of the country and is carried out through the agency of the Central bank of the country. In formulating the monetary policy, the government will be in constant touch with the central banking authorities and most of the decisions will be taken with the consent of the Central bank of the country. Monetary policy, taken alone, may not be effective in controlling an inflationary or deflationary situation and hence the monetary policy has to be implemented in conjunction with fiscal and debt management.

While formulating monetary policy, the government may have one or more objectives and it may also be possible that there will be clash of objectives while implementing them. In those cases, the monetary authorities have to take firm decisions on the basis of priorities, depending on the economic situation of the country.

OBJECTIVES OF MONETARY POLICY

Though monetary objectives vary from country to country, broadly speaking, there can be five objectives of monetary policy. They are: (1) Neutrality of money; (2) Price stabilisation; (3) Exchange stabilisation; (4) Full employment; and (5) Economic growth. Let us discuss these objectives :

1. Neutrality of Money

This objective of monetary policy was first suggested by Wicksteed and later on supported by Hayek and Robertson. According to these economists, the monetary authorities should aim at neutrality of money in relation to the economy. According to them, the root cause of all economic fluctuations is the changes in money supply and these monetary changes cause trade cycle, fluctuations and disturbances in the economy. The change in the supply of money causes change in prices, output and employment and according to the advocates of neutralist doctrine, money is the real villain of the piece of economic disturbances and if money supply is kept constant and neutral, the functioning of the economy will be smooth. Money, according to them should strictly remain neutral and should not cause any changes in prices

or other economic entities. It is not expected to encourage or discourage production or consumption in the economy and the money should take a neutral role to play in the functioning of the economy.

We know that this concept is wrong. How can money remain neutral ? Firstly, the supply of money in an economy cannot be maintained at a constant level. It has to be changed from time to time. Depending on the other factors in the economy, the velocity of circulation will change and the same quantity of money with different velocity will have different effects in the economy. The neutralists are of the view that the supply of money should have to be changed in such a way that its supply remains constant ; otherwise, money would cease to play the neutral role expected of it.

The neutrality of money is based on wrong assumptions, placing implicit faith in the Quantity Theory of money which is itself unsatifactory. Secondly, it is very difficult to make adjustments in the money supply so as to make it constant, as desired by the neutralists. We do not have any instruments to measure the hoarding of money by the people or the velocity of circulation of money. Hence, it is impossible to maintain the supply of money at constant level. Thirdly, even if the money supply is kept constant, there is no guarantee that the prices will remain stable. A change in technology will reduce the cost of production and this will create a wave of price fluctuations. Fourthly, this concept is self-contradictory. Based on the principle of *Laissez-faire* and non-intervention by the State, the neutralists want a neutral role of money; and at the same time they want the government to control the money supply by making frequent adjustments. This role conflicts with the philosophy of *Laissez-faire*. Fifthly, this concept of neutrality of money fails to explain why prices fall during the depressionary period even though the supply of money is kept constant. Further, during the depressionary period, the prices do not rise even if the supply of money is expanded; this evidently shows the ineffectiveness of neutrality of money.

The policy of neutral money is unrealistic and also impractical. It is altogether impossible to keep the money supply constant. The dynamic changes in the economy warrant frequent changes in the monetary system. Though this policy was advocated in the early 20th century, now, this has become very obsolete concept, not worth to be considered as an objective.

2. Price Stabilisation

The havoc caused during the period of 'Great Depression' made the economists and administrators realise the importance of price stability in the economy to be embodied as the primary objective of monetary policy. The countries of the world were worst hit during the 'Great Depression' of the 'thirties' with prices falling to the rockbottom level and the attendant evils in the economy. Similarly, the countries had equally experienced the unpleasant adverse effects due to soaring prices at the time of world wars. A rising price level creates problems and hardships to the fixed income group. A declining price level creates complicated problems of production and distribution. Another danger in price instability is its cumulative effect. When once the instability starts, it will gather momentum, threatening in course of time the entire economic order as well as political stability. World economic history gives ample proof to show that periods of fluctuating prices have been the periods of political and economic upheavals.

Keynes advocated price stability as the major goal of monetary policy. Price stability received official recognition during the Depression and it was embodied in the 'New Deal' programme of U. S. A. during the regime of F. D. Roosevelt.

Economists criticise price stability, as a monetary policy, on the following grounds : (a) Internal price changes not only due to monetary causes, but also due to non-monetary causes and hence it cannot be treated exclusively as a goal of monetary policy. (b) If prices are kept stable for a long time, it will not give proper incentive to investment and ultimately this will lead to economic stagnation. (c) Hayak criticises the objective of price stability as ignoring the real requirements of dynamic society. According to

him, the adoption of monetary policy in U. S. had worsened position and the depression lasted longer. He felt that monetary authorities interfere in economic activity with their instruments either much earlier or much later than it is necessary. (d) It is criticised that the objective of the monetary policy should be stabilisation of the prices of factors of production and not prices of commodities. In fact, changes in prices in different sectors of the economy in response to changes in supply and demand will be helpful in correcting maladjustments in the economy. (e) Price stability as a monetary objective is suitable for those countries which are agricultural and large in size and in which foreign trade plays an insignificant role. In other countries stability of prices does not necessarily lead to stability of business conditions.

3. Exchange stabilisation

Stability of foreign exchange rate is considered to be one of the oldest and traditional objectives of monetary policy. The government of every country is faced with the problem of fluctuating foreign exchange rates. It is a question of choosing between a stable domestic price level and a stable foreign exchange rate. For countries depending mainly on foreign trade, the importance of a stable exchange rate need not be stressed. Changes in the rate of exchange will lead to a number of difficulties. They gave rise to speculative activities in foreign exchange market. This will hinder the inflow of foreign capital and drain the domestic resources and foreign exchange accumulations.

A stable exchange rate is imperative in ensuring successful functioning of international trade, stimulating favourable investment and also of the operation of Gold Standard. The greatest defect of this policy is that prices and employment would fluctuate widely with the movements of gold in and out of the country. Under the Gold Standard, exchange stability was attained at a heavy price of unstable domestic prices and the severe price instability had led many countries to break the 'rules of the gold standard.' With the fall of the Gold Standard, the stability

of exchange rate is not considered to be a very important monetary objective. Rather, maintenance of domestic prices stability is given priority. With the establishment of the International Monetary Fund, the importance of this objective is not considered much.

4. Full Employment

With the publication of Keynes 'General Theory', full employment has been advocated as the important goal of monetary policy. Keynes himself has said: "the object of monetary policy should be to reduce the ebb and flow of the trade cycles and bring about equilibrium between savings and investments at the point of full employment."

In the pre-Keynesian days, the monetary policy tried to cure the depression by making more funds available at the low rates of interest. But the inadequacy of such a policy was demonstrated during the period of Great Depression when the desire for liquidity made it impossible to increase funds for investment. Further, Keynes analysis brought to light the need for utilising the available resources to full employment level. He pointed out that the monetary policy should be aimed at solving the unemployment problem by expanding consumption and investment expenditure. Since consumption function is more or less stable during the short period, the monetary policy should stimulate investment expenditure. In order to increase the volume of investment, cheap money policy should be followed to stimulate borrowing and increase the level of employment through multiplier-acceleration effect. When once the level of full employment is reached, then the monetary policy should aim at maintaining the full employment level through equality between savings and investments.

Though the concept of full employment has attained full recognition to be the objective of monetary policy, it is somewhat vague. It would be better if we use the term 'Optimum employment' instead of 'full employment'. The former denotes the level of utilisation of economic resources which leads to the highest national income.

5. Economic Growth

The concept of ' Economic Growth ' as the objective of mone
tary policy is the outcome of modern welfare aims practic
by Socialistic States. It is a step forward in establishing welfa
ideals in the economy. It has been recognised by modern welfa
states that achieving full employment level is not enough, but t
standard of living of the people should go up by making t
economy grow up at an accelerated pace.

Economic Growth implies qualitative and quantitative increa
in the volume of goods and services produced in the econom
It signifies the sustained increase in the per capita real incom
of the people. For this two things are essential : (*a*) that th
economy's productive capacity should increase; and (*b*) the
should be a corresponding increase in demand for goods an
services whose supply has increased. If the productive capacit
is larger and the demand lesser, there will be idle plant capacit
resulting in unemployment. On the other hand, if the demand
is in excess of productive capacity of the nation, prices will ris
and ultimately the economy has to face inflationary spiral. So
the monetary policy should aim at maintaining equilibrium
between total money demand and total productive capacity.

' Growth with stablity ' has become the new objective o
developing economies. The monetary policy is aimed at regu
lating the money supply on one side and encourage productive
activities on the other side with care to see that speculative activities
are curbed.

RECONCILIATION OF CONFLICTING OBJECTIVES

The objectives of monetary policy discussed may be incon
sistent with each other. In practical implementations, they may
be even conflicting. For example, after the war, many sectors
would face post-war recession. Employment and income would
start declining. At the same time, the prices of consumer goods
continue to rise for several months after the war period. In such
a situation the objectives would become conflicting. Rising

prices would warrant a policy of tight money to stablise the price level; but the declining employment and the business activity would warrant easy money condition. In such contexts, the monetary authorities had to make choices. The choice should be in the best interest of the country as a whole depending on the circumstances.

LIMITATIONS OF MONETARY POLICY

Before the Great Depression of thirties, the monetary policy occupied a position of prestige and the countries used to place excessive reliance on it to achieve economic stability. But with the advent of the Great Depression, governments began to realise that the economies could not be recovered from depressionary conditions merely by adopting the elementary principles of credit control and supply of money as envisaged in the monetary policy. Under the influence of Keynes, the monetary policy lost its reputation and fiscal policy came into prominance. Keynes stated that the monetary policy could be expected to play only a limited role. Keynes wanted that the State should have to exercise a guiding influence on the propensity to consume through its scheme of taxation.

Why is monetary policy ineffective in generating recovery from Depression ?

To fight depression, everyone would suggest *cheap money policy* in the belief that such a policy would promote new investments in the economy. It is on this ground a low rate of interest was advocated during the depressionary period. But in actual practice, the cheap money policy with low rates of interest fail to push up investments in the economy, the reason being that during depression, investments generally becomes *interest-inelastic*, i.e., a low rate of interest fails to promote new investments in the economy. Why is this so ? Interest is an insignificant element in the production cost. During depression, new investments are influenced more by future business prospects rather than the rate of interest. Hence, cheap money policy and

monetary expansion with low rate of interest may not be ... to lift the economy out of depression. Further, there are ... non-monetary factors which play an important role in bring... about depression in the economy. The monetary policy ... do little to effectively check those non-monetary forces. ... the contrary, fiscal policy might prove more effective in combat... non-monetary factors in the depressionary period. For example, effective demand can be raised during depression only by increas... consumption expenditure. This can be influenced more ... fiscal policy rather than monetary policy. It is on these grounds that monetary policy often proves ineffective during times of depression and unemployment. It is only the fiscal policy which would prove effective during depression and unemployment.

But, monetary policy is decidedly superior in checking inflationary pressures. But there are certain limitations. (*a*) While adopting anti-inflationary measures and reduction of money supply and credit to combat inflation, the operation might be inadvertently carried too far so as to give birth to deflationary forces in the economy. In that case the economic growth will receive a set back. Further, during an inflationary period, the adoption of policy of *dear money* by the monetary authorities will not be relished by bankers, businessmen and producers. (*b*) Banks may subvert monetary policy by finding new reserves through deposit mobilisation. (*c*) An excessive time-lag between the application of monetary measures and their actual effects may make the monetary policy ineffective. (*d*) There may be some political opposition to high interest rates and restrictive monetary policy. (*e*) Monetary policy will be blunt if prices and wages are flexible upwards but inflexible downwards. A tight money policy may create unemployment, instead of restraining the rise in prices.

RESERVE BANK OF INDIA AND MONETARY POLICY

An important function of the Reserve Bank of India, in the capacity of the Central Bank of the country, is to control and regulate the volume of currency and credit in the economy. This