Part Two
BANKING

Chapter 12

Commercial Banking

1. EVOLUTION, ORIGIN AND GROWTH OF BANKING

The word 'bank' is used in the sense of a commercial bank. It is of Germanic origin though some persons trace its origin to the French word 'Banqui' and the Italian word 'Banca'. It referred to a bench for keeping, lending, and exchanging of money or coins in the market place by money lenders and money changers.

There was no such word as 'banking' before 1640, although the practice of safe-keeping and savings flourished in the temple of Babylon as early as 2000 B.C. Chanakya in his *Arthashastra* written in about 300 B.C. mentioned about the existence of powerful guilds of merchant bankers who received deposits, advanced loans and issued *hundis* (letters of transfer). The Jain scriptures mention the names of two bankers who built the famous Dilwara Temples of Mount Abu during 1197 and 1247 A.D.

The first bank called the 'Bank of Venice' was established in Venice, Italy in 1157 to finance the monarch in his wars. The bankers of Lombardy were famous in England. But modern banking began with the English goldsmiths only after 1640. The first bank in India was the 'Bank of Hindustan' started in 1770 by Alexander & Co., an English agency house in Calcutta which failed in 1782 with the closure of the agency house. But the first bank in the modern sense was established in the Bengal Presidency as the Bank of Bengal in 1806.

History apart, it was the 'merchant banker' who first evolved the system of banking by trading in commodities than money. Their trading activities required the remittances of money from one place to another. For this, they issued 'hundis' to remit funds. In India, such merchant bankers were known as 'Seths'.

The next stage in the growth of banking was the goldsmith. The business of goldsmith was such that he had to take special precautions against theft of gold and jewellery. If he seemed to be an honest person, merchants in the neighbourhood started leaving their bullion, money and ornaments in his care. As this practice spread, the goldsmith started charging something for taking care of the money and bullion. As evidence for receiving valuables, he issued a receipt. Since gold and silver coins had no marks of the owner, the goldsmith started lending them. As the goldsmith was prepared to give the holder of the receipt an equal amount of money on demand, the goldsmith receipts became like cheques as a medium of exchange and a means of payment.

The next stage in the growth of banking is the moneylender. The goldsmith found that on an average the withdrawals of coins were much less than the deposits with him. So he started advancing the coins on loan by charging interest. As a safeguard, he kept some money in the reserve. Thus the goldsmith-moneylender became a banker who started performing the two functions of modern banking, that of accepting deposits and advancing loans.

2. MEANING OF BANK

Chamber's Twentieth Century Dictionary defines a bank as an "institution for the keeping, lending and exchanging, etc. of money." Economists have also defined a bank highlighting its various functions. According to Crowther, "The banker's business is to take the debts of other people to offer his own in exchange, and thereby create money."[1] A similar definition has been given by Kent who defines a bank as "an organisation whose principal operations are concerned with the accumulation of the temporarily idle money of the general public for the purpose of advancing to others for expenditure."[2] Sayers, on the other hand, gives a still more detailed definition of a bank thus: "Ordinary banking business consists of changing cash for bank deposits and bank deposits for cash; transferring bank deposits from one person or corporation (one 'depositor') to another; giving bank deposits in exchange for bills of exchange, government bonds, the secured or unsecured promises of businessmen to repay, etc."[3] Thus a bank is an institution which accepts deposits from the public and in turn advances loans by creating credit. It is different from other financial institutions in that they cannot create credit though they may be accepting deposits and making advances.

3. TYPES OF BANKS

Banks are of various types which are explained as under:

1. *Commercial Banks*. Commercial banks are those banks which perform all kinds of banking functions such as accepting deposits, advancing loans, credit creation, and agency functions. They are also called joint stock banks because they are organised in the same manner as joint stock companies. They usually advance short-term loans to customers. Of late, they have started giving medium-term and long-term loans also. In India 20 major commercial banks have been nationalised, whereas in developed countries they are run like joint stock companies in the private sector. Some of the commercial banks in India are Andhra Bank, Canara Bank, Indian Bank, Punjab National Bank, etc.

2. *Exchange Banks*. Exchange banks are those banks which deal in foreign exchange and specialise in financing foreign trade. They are also called foreign exchange banks. In India, these exchange banks have their head offices located outside India. The Chartered Bank, and the Grindlays Bank have their head offices in England, whereas the American Express Bank, and Citi Bank have their head offices in the USA. These banks also render other services such as collecting and supplying information about the foreign customers, providing remittance facilities etc.

3. *Industrial Banks*. Industrial banks are those banks which provide medium-term and long-term finance to industries for the purchase of land, machinery etc. They underwrite the debentures and shares of industries and also subscribe to them. In India, there are a number of financial institutions which perform the functions of industrial banks such as Industrial Development Bank of India, Industrial Finance Corporation of India, Industrial Credit and Investment Corporation of India, etc. Each State in India has its own State Financial Corporation. These institutions are also known as Development Banks.

4. *Agricultural Banks*. Agricultural banks are those banks which provide credit to farmers for short-term, medium-term and long-term needs. In India, commercial banks, regional rural banks and Agricultural Cooperative Banks provide short-term loans to farmers. Land Development Banks give medium-term and long-term loans to farmers on the mortgage of their land. The National Bank for Agriculture and Rural Development (NABARD) provides refinance facilities to all types of banks which give loans to agriculturists.

5. *Cooperative Banks*. Cooperative banks are those financial institutions which are organised on the principle of cooperation. They provide short-term and medium-term loans to their members. In rural areas, there are agricultural cooperative banks which accept deposits and give loans to agriculturists, rural artisans, etc. In urban areas, there are also cooperative banks which perform the functions of ordinary commercial banks but give loans to their members only. There is a State Cooperative Bank in every state of India with its branches at the district level known as the Central Cooperative Bank. The Central Cooperative Bank, in turn, has its branches both in urban and rural areas. Every State Cooperative Bank is an apex bank which provides credit facilities to the Central Cooperative Banks. It mobilises financial resources from the richer sections of the urban population by accepting deposits and creating credit like commercial banks and borrowing from the money market. It also gets funds from the Reserve Bank of India.

6. *Savings Banks*. Savings banks help promote small savings and mobilise them. They have been very successful in Japan and Germany. In India, post offices act as savings bank.

7. *Central Bank*. The central bank is the apex bank in a country which controls its monetary and banking structure. It is owned by the government of the country and operates in national interest. It regulates and issues currency, performs banking and a agency services for the state, keeps cash reserves of commercial banks, keeps and manages international currency, acts as the lender of the last resort, acts as a clearing house, and controls of credit. The Reserve Bank of India

[1] G. Crowther, *An Outline of Money*, p. 81.
[2] R.P. Kent, *Money and Banking*, p. 76.
[3] R.S. Sayers, *Modern Banking*, 7th edn., p. 22.

is the Central bank in India.

4. FUNCTIONS OF COMMERCIAL BANKS

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

(1) Accepting Deposits

This is the oldest function of a bank and the banker used to charge a commission for keeping the money in its custody when banking was developing as an institution. Nowadays a bank accepts three kinds of deposits from its customers. The first is the *savings* deposits on which the bank pays small interest to the depositors who are usually small savers. The depositors are allowed to draw their money by cheques up to a limited amount during a week or year. Businessmen keep their deposits in *current* accounts. They can withdraw any amount standing to their credit in current deposits by cheques without notice. The bank does not pay interest on such accounts but instead charges a nominal sum for services rendered to its customers. Current accounts are known as demand deposits. Deposits are also accepted by a bank in *fixed* or *time* deposits. Savers who do not need money for a stipulated period from 6 months to longer periods ranging up to 10 years or more are encouraged to keep it in fixed deposit accounts. The bank pays a higher rate of interest on such deposits. The rate of interest increases with the length of the time period of the fixed deposit. But there is always the maximum limit of the interest rate which can be paid. For instance, the interest rate on fixed deposits over five years is 11 per cent in India.

(2) Advancing Loans

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

(*a*) *Cash Credit.* The bank advances loans to businessmen against certain specified securities. The amount of the loan is credited to the current account of the borrower. In case of a new customer a loan account for the sum is opened. The borrower can withdraw money through cheques according to his requirements but pays interest on the full amount.

(*b*) *Call Loans.* These are very short-term loans advanced to the bill brokers for not more than fifteen days. They are advanced against first class bill or securities. Such loans can be recalled at a very short notice. In normal times they can also be renewed.

(*c*) *Overdraft.* A bank often permits a businessman to draw cheques for a sum greater than the balance lying in his current account. This is done by providing

the overdraft facility up to a specific amount to the businessman. But he is charged interest only on the amount by which his current account is actually overdrawn and not by the full amount of the overdraft sanctioned to him by the bank.

(*d*) *Discounting bills of Exchange.* If a creditor holding a bill of exchange wants money immediately, the bank provides him the money by discounting the bill of exchange. It deposits the amount of the bill in the current account of the bill-holder after deducting its rate of interest for the period of the loan which is not more than 90 days. When the bill of exchange matures, the bank gets its payment from the banker of the debtor who accepted the bill.

(3) Credit Creation

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

(4) Financing Foreign Trade

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

(5) Agency Services

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

(6) Miscellaneous Services

Besides the above noted services, the commercial bank performs a number of other services. It acts as the custodian of the valuables of its customers by providing them lockers where they can keep their jewellery and valuable documents. It issues various forms of credit instruments, such as cheques, drafts, travellers' cheques, etc. which facilitate transactions. The bank also issues letters of credit and acts as a referee to its clients. It underwrites shares and debentures of companies and helps in the collection of funds from the public. Some commer-

Chapter 15

Credit Creation by Commercial Banks

1. DO BANKS CREATE CREDIT?

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

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

Do banks really create credit or deposits?

There have been two views on this subject: one held by certain economists like Hartley Withers, and the other held by practical bankers like Walter Leaf.

According to Withers, banks can create credit by opening a deposit, every time they advance a loan. This is because every time a loan is sanctioned, payment is made through cheques by the customers. All such payments are adjusted through the clearing house. So long as a loan is due, a deposit of that amount remains outstanding in the books of the bank. Thus every loan creates a deposit. But this is an exaggerated and extreme view.

Dr Leaf[1] and practical bankers do not agree with this view. They go to the opposite extreme. They hold that banks cannot create money out of thin air. They can lend only what they have in cash. Therefore, they cannot and do not create money.

This view is also wrong because it is based on arguments relating to a single bank. As pointed out by Prof Samuelson, "The banking system as a whole can do what each small bank cannot do: it can expand its loans and investments many times the new reserves of cash created for it, even though each small bank is lending out only a fraction of its deposits."[2]

[1]Walter Leaf, *Banking*, 1928, pp. 101-04.
[2]Paul A. Samuelson, *Economics*, 10th edn, p. 301.

In fact, a bank is not a cloak room where one can keep currency notes and claim those very notes when one desires. Banks know by experience that all depositors do not withdraw their money simultaneously. Some withdraw while others deposit on the same day. So by keeping a small cash in reserve for day-to-day transactions, the bank is able to advance loans on the basis of excess reserves. When the bank advances a loan it opens an account in the name of the customer. The bank knows by experience that the customer will withdraw money by cheques which will be deposited by his creditors in this bank or some other bank, where they have their accounts. Settlements of all such cheques are made in the clearing house. The same procedure is followed in other banks. The banks are able to create credit or deposits by keeping a small cash in reserves and lending the remaining amount.

In granting a loan, a bank actively creates a claim against itself and in favour of borrower. "The claims the bank takes from its customers, in exchange for the deposits entered in the books, are the bank's assets. The standard assets of a commercial bank are overdrafts and loans, bills discounted, investments and cash."[3]

The bank provides overdraft facility to a customer on the basis of some security. It enters the amount of the overdraft in the existing account of the customer and allows him to draw cheques for the overdraft amount agreed upon. It thus creates a deposit.

When a bank discounts a bill of exchange, it in fact, buys the bill from the customer for a short period of 90 days or less. The amount of the bill is credited in the account of the customer who withdraws it through a cheque. Or, it pays the sum through a cheque on itself. In both cases, the bank creates a deposit equal to the amount of the bill of exchange less the discount charges.

A commercial bank also creates a deposit by making investments by buying government bonds and securities. The bank pays for the bond through a cheque on itself to the central bank. If it buys a bond from the stock exchange, it credits the amount in the account of the seller, if he happens to be its customer. Otherwise, it pays a cheque on itself which is deposited in some other bank. In any case a deposit is created either in this bank or some other bank. In all such cases, liabilities and assets in the banking system on the whole are increased. Thus loans by banks create deposits. It is in this sense that credit is created by commercial banks.

2. THE PROCESS OF CREDIT CREATION

Let us explain the actual process of credit creation. We have seen above that the ability of banks to create credit depends on the fact that banks need only a small percentage of cash to deposits. If banks kept 100 per cent cash against deposits,

[3]R.S. Sayers, *Modern Banking*, 7th edn., 1967, pp. 7-8.

there would be no credit creation. Modern banks do not keep 100 per cent cash reserves. They are legally required to keep a fixed percentage of their deposits in cash, say 10, 15 or 20 per cent. They lend and/or invest the remaining amount which is called *excess reserves*. A bank can lend equal to its excess reserves. But the entire banking system can lend and create credit (or deposits) upto a multiple of its original excess reserves. The deposit multiplier depends upon the required reserve ratio which is the basis of credit creation. Symbolically, the required reserve ratio:

$$RRr = \frac{RR}{D}$$

or $RR = RRr \times D$

where RR are the required cash reserves with banks, RRr is the required reserve ratio and D is the demand deposits of banks. To show that D depends on RR and RRr, divide both sides of the above equation by RRr:

$$\frac{RR}{RRr} = \frac{RRr \times D}{RRr}$$

or $$\frac{RR}{RRr} = D$$

or $$\frac{1}{RRr} = \frac{D}{RR}$$

or $$D = \frac{1}{RRr} \times RR$$

where $1/RRr$, the reciprocal of the percentage reserve ratio, is called the *deposit (or credit) expansion multiplier*. It determines the limits to the deposit expansion of a bank. The maximum amount of demand deposits which the banking system can support with any given amount of RR is by applying the multiplier to RR. Taking the initial change in the volume of deposits (ΔD) and in cash reserves (ΔRR), it follows from any given percentage of RRr that

$$\Delta D = RR \times \frac{1}{RRr}$$

To understand it, suppose the RRr for the banks is fixed at 10 per cent and the initial change in cash reserves is Rs 1000. By applying the above formula, the maximum increase in demand deposits will be

$$\Delta D = 1000 \times \frac{1}{0.10} = \text{Rs } 10000$$

This is the extent to which the banking system can create credit. The above equation can also be expressed as follows:

$\Delta D = \Delta RR[1+(1-RRr)+(1-RRr)^2+\ldots+(1-RRr)^n]$

The sum of the geometric progression within brackets gives:

$$\frac{1}{1-(1-RRr)} = \frac{1}{RRr}$$

$$\Delta D = \Delta RR \times \frac{1}{RRr}$$

The deposit expansion multiplier rests on the assumptions that banks lend out all their excess reserves and RRr remains constant.

To explain the process of credit creation, we make the following *assumptions:*

1. There are many banks, say *A, B, C,* etc., in the banking system.
2. Each bank has to keep 10 per cent of its deposits in reserves. In other words, 10 per cent is the required reserve ratio fixed by law.
3. The first bank has Rs 1000 as deposits.
4. The loan amount drawn by the customer of one bank is deposited in full in the second bank, and that of the second bank into the third bank, and so on.
5. Each bank starts with the initial deposit which is deposited by the debtor of the other bank.

Given these assumptions suppose that Bank *A* receives a cash deposits of Rs 1000 to begin with. This is the cash in hand with the bank which is its asset and this amount is also the liability of the bank by way of deposits it holds. Given the reserve ratio of 10 per cent, the bank keeps Rs 100 in reserves and lends Rs 900 to one of its customers who, in turn, gives a cheque to some person from whom he borrows or buys something. The net changes in Bank *A*'s balance sheet are +Rs 100 in reserves and +Rs 900 in loans on the assets side and Rs 1000 in demand deposits on the liabilities side as shown in Table I. Before these changes Bank *A* had zero excess reserves.

TABLE I. BALANCE SHEET OF BANK *A*

Assets		*Liabilities*	
Reserves	Rs 1000	Deposits	Rs 1000
	net changes		*net changes*
Reserves	Rs 100	Deposits	Rs 1000
Loans	Rs 900		

This loan of Rs 900 is deposited by the customer in Bank *B* whose balance sheet is shown in Table II. Bank *B* starts with a deposit of Rs 900, keeps 10 per cent of it or Rs 90 as cash in reserve. Bank *B* has Rs 810 as excess reserves which it lends thereby creating new deposits.

TABLE II. BALANCE SHEET OF BANK *B*

Assets		*Liabilities*	
Reserves	Rs 900	Deposits	Rs 900
	net changes		*net changes*
Reserves	Rs 90	Deposits	Rs 900
Loans	Rs 810		

This loan of Rs 810 is deposited by the customer of Bank *B* into Bank *C*. The balance sheet of Bank *C* is shown in Table III. Bank *C* keeps Rs 81 or 10 per cent of Rs 810 in cash reserves and lends Rs 729.

TABLE III. BALANCE SHEET OF BANK *C*

Assets		*Liabilities*	
Reserves	Rs 810	Deposits	Rs 810
	net changes		*net changes*
Reserves	Rs 81	Deposits	Rs 810
Loans	Rs 729		

This process goes on to other banks. Each bank in the sequence gets excess reserves, lends and creates new demand deposits equal to 90% of the preceding bank's. In this way, new deposits are created to the tune of Rs 10000 in the banking system, as shown in Table IV.

TABLE IV. MULTIPLE CREDIT CREATION

Bank	*Required Reserves*	*New Loans*	*New Deposits*
A	Rs 100	Rs 900	Rs 1000
B	Rs 90	Rs 810	Rs 900
C	Rs 81	Rs 729	Rs 810
All other Banks	Rs 729	Rs 6561	Rs 7290
Total for the Banking System	Rs 1000	Rs 9000	Rs 10000

The multiple credit creation shown in the last column of the above Table can also be worked out algebraically as:

$$\text{Rs } 1000[1+(9/10)+(9/10)^2+(9/10)^3+\ldots+(9/10)^n]$$
$$= \text{Rs } 1000\ (1/1-9/10) = \text{Rs } 1000\ (1/1/10) = \text{Rs } 1000\times 10 = \text{Rs } 10000.$$

3. LIMITATIONS ON THE POWER OF BANKS TO CREATE CREDIT

We have seen above how the banking system as a whole can create credit. But it does not mean that banks have unlimited powers to create credit. In fact, they have to function under certain restrictions. The following are the limitations on the power of commercial banks to create credit.

1. *Amount of cash.* The credit creation power of banks depends upon the amount of cash they possess. The larger the cash, the larger the amount of credit that can be created by banks. The amount of cash that a bank has in its vaults cannot be determined by it. It depends upon the primary deposits with the bank. The bank's power of creating credit is thus limited by the cash it possesses.

2. *Proper securities.* An important factor that limits the power of a bank to create credit is the availability of adequate securities. A bank advances loans to its customers on the basis of a security, or a bill, or a share, or a stock or a building, or some other type of asset. It turns ill-liquid form of wealth into liquid wealth and thus creates credit. If proper securities are not available with the public, a bank cannot create credit. As pointed out by Crowther, "Thus the bank does not create money out of thin air, it transmutes other forms of wealth into money."[4]

3. *Banking habits of the people.* The banking habits of the people also govern the power of credit creation on the part of banks. If people are not in the habit of using cheques, the grant of loans will lead to the withdrawal of cash from the credit creation stream of the banking system. This reduces the power of banks to create credit to the desired level.

4. *Minimum legal reserve ratio.* The minimum legal reserve ratio of cash to deposits fixed by the central bank is an important factor which determines the power of banks to create credit. The higher this ratio (*RRr*), the lower the power of banks to create credit; and the lower the ratio, the higher the power of banks to create credit.

5. *Excess reserves.* The process of credit creation is based on the assumption that banks stick to the required reserve ratio fixed by the central bank. If banks keep more cash in reserves than the legal reserve requirements, their power to create credit is limited to that extent. If Bank *A* of our example keeps 25 per cent of Rs 1000 instead of 20 per cent, it will lend Rs 750 instead of Rs 800. Consequently, the amount of credit creation will be reduced even if the other banks in the system stick to the legal reserve ratio of 20 per cent.

6. *Leakages.* If there are leakages in the credit creation stream of the banking system, credit expansion will not reach the required level, given the legal reserve ratio. It is possible that some persons who receive cheques do not deposit them in their bank accounts, but withdraw the money in cash for spending or for hoarding at home. The extent to which the amount of cash is withdrawn from the chain of credit expansion, the power of the banking system to create credit is limited.

7. *Cheque clearances.* The process of credit expansion is based on the assumption that cheques drawn by commercial banks are cleared immediately and reserves of commercial banks expand and contract uniformly by cheque transactions. But it is not possible for banks to receive and draw cheques of exactly equal amount. Often some banks have their reserves increased and others reduced through cheque clearances. This expands and contracts credit creation on the part of banks. Accordingly, the credit creation stream is disturbed.

8. *Behaviour of other banks.* The power of credit creation is further limited by the behaviour of other banks. If some of the banks do not advance loans to the extent required of the banking system, the chain of credit expansion will be broken. Consequently, the banking system will not be "loaned up".

9. *Economic climate.* Banks cannot continue to create credit limitlessly. Their power to create credit depends upon the economic climate in the country. If there

[4]Geoffrey Crowther, *An Outline of Money, revised editions*. 1948. p. 30.

are boom times there is optimism. Investment opportunities increase and businessmen take more loans from banks. So credit expands. But in depressed times when the business activity is at a low level, banks cannot force the business community to take loans from them. Thus the economic climate in a country determines the power of banks to create credit.

10. *Credit control policy of the central bank.* The power of commercial banks to create credit is also limited by the credit control policy of the central bank. The central bank influences the amount of cash reserves with banks by open market operations, discount rate policy and varying margin requirements. Accordingly, it affects the credit expansion or contraction by commercial banks.

11. *Contagion Effect.* If a bank fails to remain solvent due to huge loan losses, a credit panic is created among banks. The fear of failure of a particular bank may lead to a 'run' and depositors would make huge withdrawals. This may spread to other banks. This is called the "Contagion effect" whereby credit creation stops altogether.

We may conclude that commercial banks do not possess unlimited powers to create credit.

EXERCISES

1. Explain the statement that "loans create deposits."
2. Explain how "loans make deposits". What are the limitations to such credit creation by banks?
3. Describe the process of credit creation by commercial banks.
4. How do banks create credit? What are the limitations on the power of banks to create credit?

its financial requirements through cooperatives or individually.

9. Every country has only one central bank with its offices at important centres of the country. On the other hand, there are many commercial banks with hundreds of branches within and outside the country.

10. The central bank is the custodian of the foreign currency reserves of the country while the commercial bank is the dealer of foreign currencies.

11. The chief executive of the central bank is designated as "Governor", whereas the chief executive of a commercial bank is called 'Chairman'.

3. DEFINITION OF A CENTRAL BANK

A central bank has been defined in terms of its functions. According to Vera Smith, "The primary definition of central banking is a banking system in which a single bank has either complete control or a residuary monopoly of note issue." W.A. Shaw defines a central bank as a bank which controls credit. To Hawtrey, a central bank is that which is the lender of the last resort. According to A.C.L. Day, a central bank is "to help control and stabilise the monetary and banking system." According to Sayers, the central bank "is the organ of government that undertakes the major financial operations of the government and by its conduct of these operations and by other means, influences the behaviour of financial institutions so as to support the economic policy of the Government." Sayers refers only to the nature of the central bank as the government's bank. All these definitions are narrow because they refer only to one particular function of a central bank.

On the other hand, Samuelson's definition is wide. According to him, a central bank "is a bank of bankers. Its duty is to control the monetary base . . . and through control of this 'high-powered money' to control the community's supply of money." But the broadest definition has been given by De Kock. In his words, a central bank is "a bank which constitutes the apex of the monetary and banking structure of its country and which performs as best as it can in the national economic interest, the following functions: (*i*) The regulation of currency in accordance with the requirements of business and the general public for which purpose it is granted either the sole right of note issue or at least a partial monopoly thereof. (*ii*) The performance of general banking and agency for the state. (*iii*) The custody of the cash reserves of the commercial banks. (*iv*) The custody and management of the nation's reserves of international currency. (*v*) The granting of accommodation in the form of re-discounts and collateral advances to commercial banks, bill brokers and dealers, or other financial institutions and the general acceptance of the responsibility of lender of the last resort. (*vi*) The settlement of clearance balances between the banks. (*vii*) The control of credit in accordance with the needs of business and with a view to carrying out the broad monetary policy adopted by the state." De Kock's definition is too long to be called a definition. For, a definition must be brief.

4. FUNCTIONS OF A CENTRAL BANK

A central bank performs the following functions, as given by De Kock and accepted by the majority of economists.

1. Regulator of Currency

The central bank is the bank of issue. It has the monopoly of note issue. Notes issued by it circulate as legal tender money. It has its issue department which issues notes and coins to commercial banks. Coins are manufactured in the government mint but they are put into circulation through the central bank.

Central banks have been following different methods of note issue in different countries. The central bank is required by law to keep a certain amount of gold and foreign securities against the issue of notes. In some countries, the amount of gold and foreign securities bears a fixed proportion, between 25 to 40 per cent of the total notes issued. In other countries, a minimum fixed amount of gold and foreign currencies is required to be kept against note issue by the central bank. This system is operative in India whereby the Reserve Bank of India is required to keep Rs 115 crores in gold and Rs 85 crores in foreign securities. There is no limit to the issue of notes after keeping this minimum amount of Rs 200 crores in gold and foreign securities.

The monopoly of issuing notes vested in the central bank ensures uniformity in the notes issued which helps in facilitating exchange and trade within the country. It brings stability in the monetary system and creates confidence among the public. The central bank can restrict or expand the supply of cash according to the requirements of the economy. Thus it provides elasticity to the monetary system. By having a monopoly of note issue, the central bank also controls the banking system by being the ultimate source of cash. Last but not the least, by entrusting the monopoly of note issue to the central bank, the government is able to earn profits from printing notes whose cost is very low as compared with their face value.

2. Banker, Fiscal Agent and Adviser to the Government

Central banks everywhere act as bankers, fiscal agents and advisers to their respective governments. As banker to the government, the central bank keeps the deposits of the central and state governments and makes payments on behalf of governments. But it does not pay interest on government deposits. It buys and sells foreign currencies on behalf of the government. It keeps the stock of gold of the government. Thus it is the custodian of government money and wealth. As a fiscal agent, the central bank makes short-term loans to the government for a period not exceeding 90 days. It floats loans, pays interest on them, and finally repays them on behalf of the government. Thus it manages the entire public debt. The central bank also advises the government on such economic and money matters as controlling inflation or deflation, devalution or revaluation of the

currency, deficit financing, balance of payments, etc. As pointed out by De Kock, "Central banks everywhere operate as bankers to the state not only because it may by more convenient and economical to the state, but also because of the intimate connection between public finance and monetary affairs."

3. Custodian of Cash Reserves of Commercial Banks

Commercial banks are required by law to keep reserves equal to a certain percentage of both time and demand desposits liabilities with the central banks. It is on the basis of these reserves that the central bank transfers funds from one bank to another to facilitate the clearing of cheques. Thus the central bank acts as the custodian of the cash reserves of commercial banks and helps in facilitating their transactions. There are many advantages of keeping the cash reserves of the commercial banks with the central bank, according to De Kock. In the first place, the centralisation of cash reserves in the central bank is a source of great strength to the banking system of a country. *Secondly*, centralised cash reserves can serve as the basis of a large and more elastic credit structure than if the same amount were scattered among the individual banks. *Thirdly*, centralised cash reserves can be utilised fully and most effectively during periods of seasonal strains and in financial crises or emergencies. *Fourthly*, by varying these cash reserves the central bank can control the credit creation by commercial banks. *Lastly*, the central bank can provide additional funds on a temporary and short term basis to commercial banks to overcome their financial difficulties.

4. Custody and Management of Foreign Exchange Reserves

The central bank keeps and manages the foreign exchange reserves of the country. It is an official reservoir of gold and foreign currencies. It sells gold at fixed prices to the monetary authorities of other countries. It also buys and sells foreign currencies at international prices. Further, it fixes the exchange rates of the domestic currency in terms of foreign currencies. It holds these rates within narrow limits in keeping with its obligations as a member of the International Monetary Fund and tries to bring stability in foreign exchange rates. Further, it manages exchange control operations by supplying foreign currencies to importers and persons visiting foreign countries on business, studies, etc. in keeping with the rules laid down by the government.

5. Lender of the Last Resort

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

"the front door". The other method is to give temporary accommodation to the commercial banks or discount houses directly through the "back door". The difference between the two methods is that lending at the front door is at the bank rate and in the second case at the market rate. Thus the central bank as lender of the last resort is a big source of cash and also influences prices and market rates.

6. Clearing House for Transfer and Settlement

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

When the central bank acts as a clearing agency, it is time-saving and convenient for the commercial banks to settle their claims at one place. It also economises the use of money. "It is not only a means of economising cash and capital but is also a means of testing at any time the degree of liquidity which the community is maintaining."[1]

7. Controller of Credit

The most important function of the central bank is to control the credit creation power of commercial bank in order to control inflationary and deflationary pressures within this economy. For this purpose, it adopts quantitative methods and qualitative methods. Quantitative methods aim at controlling the cost and quantity of credit by adopting bank rate policy, open market operations, and by variations in reserve ratios of commercial banks. Qualitative methods control the use and direction of credit. These involve selective credit controls and direct action. By adopting such methods, the central bank tries to influence and control credit creation by commercial banks in order to stabilise economic activity in the country.

Besides the above noted functions, the central banks in a number of developing countries have been entrusted with the responsibility of developing a strong banking system to meet the expanding requirements of agriculture, industry, trade and commerce. Accordingly, the central banks possess some additional powers of supervision and control over the commercial banks. They are the issuing of licences; the regulation of branch expansion; to see that every bank maintains the minimum paid up capital and reserves as provided by law; inspecting or auditing the accounts of banks; to approve the appointment of chairmen and directors of such banks in accordance with the rules and qualifications; to control and recommend merger of weak banks in order to avoid their failures and to protect the

[1] H.P. Willis, *Theory and Practice of Central Banking*, p. 313.

interest of depositors; to recommend nationalisation of certain banks to the government in public interest; to publish periodical reports relating to different aspects of monetary and economic policies for the benefit of banks and the public; and to engage in research and train banking personnel etc.)

5. CENTRAL BANK AS THE CONTROLLER OF CREDIT

Objectives of Credit Control

Credit control is the means to control the lending policy of commercial banks by the central bank. The central bank controls credit to achieve the following objectives:

1. *To Stabilise the Internal Price Level.* One of the objective of controlling credit is to stabilise the price level in the country. Frequent changes in prices adversely affect the economy. Inflationary or deflationary trends need to be prevented. This can by achieved by adopting a judicious policy of credit control.

2. *To Stabilise the Rate of Foreign Exchange.* With the change in the internal prices level, exports and imports of the country are affected. When prices fall, exports increase and imports decline. Consequently, the demand for domestic currency increases in the foreign market and its exchange rate rises. On the contrary, a rise in domestic prices leads to a decline in exports and an increase in imports. As a result, the demand for foreign currency increases and that of domestic currency falls, thereby lowering the exchange rate of the domestic currency. Since it is the volume of credit money that affects prices, the central bank can stabilise the rate of foreign exchange by controlling bank credit.

3. *To Protect the Outflow of Gold.* The central bank holds the gold reserves of the country in its vaults. Expansion of bank credit leads to rise in prices which reduce exports and increase imports, thereby creating an unfavourable balance of payments. This necessitates the export of gold to other countries. The central bank has to control credit in order to prevent such outflows of gold to other countries.

4. *To Control Business Cycles.* Business cycles are a common phenomenon of capitalist countries which lead to periodic fluctuations in production, employment and prices. They are characterised by alternating periods of prosperity and depression. During prosperity, there is large expansion in the volume of credit, and production, employment and prices rise. During depression, credit contracts, and production, employment and prices fall. The central bank can counteract such cyclical fluctuations through contraction of bank credit during boom periods, and expansion of bank credit during depression.

5. *To Meet Business Needs.* According to Burgess, one of the important objectives of credit control is the "adjustment of the volume of credit to the volume of business." Credit is needed to meet the requirements of trade and industry. As business expands, larger quantity of credit is needed, and when business contracts less credit is needed. Therefore, it is the central bank which can

meet the requirements of business by controlling credit.

6. *To Have Growth with Stability.* In recent years, the principal objective of credit control is to have growth with stability. The other objectives, such as price stability, foreign exchange rate stability, etc., are regarded as secondary. The aim of credit control is to help in achieving full employment and accelerated growth with stability in the economy without inflationary pressures and balance of payments deficits.

Methods of Credit Control

The central bank adopts two types of methods of credit control. They are the quantitative and qualitative methods. *Quantitative* methods aim at controlling the cost and quantity of credit by adopting such techniques as variations in the bank rate, open market operations, and variations in the reserve ratios of commercial banks. On the other hand, *qualitative methods* control the use and direction of credit. These involve selective credit controls and direct action.

1. Bank Rate or Discount Rate Policy

The bank rate or the discount rate is the rate fixed by the central bank at which it rediscounts first class bills of exchange and government securities held by the commercial banks. The bank rate is the interest rate charged by the central bank at which it provides rediscount to banks through the *discount window.* The central bank controls credit by making variations in the bank rate. If the need of the economy is to expand credit, the central bank lowers the bank rate. Borrowing from the central bank becomes cheap and easy. So the commercial banks will borrow more. They will, in turn, advance loans to customers at a lower rate. The market rate of interest will be reduced. This encourages business activity, and expansion of credit follows which encourages the rise in prices. The opposite happens when credit is to be contracted in the economy. The central bank raises the bank rate which makes borrowing costly from it. So the banks borrow less. They, in turn, raise their lending rates to customers. The market rate of interest also rises because of the tight money market. This discourages fresh loans and puts pressure on borrowers to pay their past debts. This discourages business activity. There is contraction of credit which depresses the rise in price. Thus lowering the bank rate offsets deflationary tendencies and raising the bank rate controls inflation.

But how do changes in the bank rate affect prices and production? There are two views which explain this process. One held by R.G. Hawtrey and the other by Keynes.

Hawtrey's View. According to Hawtrey, changes in the bank rate affect changes in the short-term rates of interest which, in turn, affect the behaviour of dealers and producers in holding stocks of finished and semi-finished goods. Suppose the bank rate rises. It raises the short-term interest rates. Consequently, the cost of borrowing and of holding stocks of goods increases. The dealers will, therefore,