GEC S3 01(M/P)

Money, Banking and Financial Systems

SEMESTER-III

ECONOMICS

BLOCK- 2

KRISHNA KANTA HANDIQUI STATE OPEN UNIVERSITY

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First Edition : June, 2018

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Printed and published by Registrar on behalf of the Krishna Kanta Handiqui State Open University

The University acknowledges with thanks the financial support provided by the **Distance Education Bureau, UGC** for the preparation of this study material.

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BLOCK INTRODUCTION

The second block of this course *Money, Banking and Financial Systems* consists of the next eight units. The Unit 8 and 9 shall discuss the commercial banks. Unit 8 discusses functions of commercial banks, balance sheet of a commercial bank and an attempt has been made to discuss the conflict between liquidity and profit of commercial banks. Unit 9 deals with credit creation by commercial banks. After going through this unit, you will be able to understand the basis of credit creation by the commercial banks and explain the process of credit creation with its limitations. Here we will also discuss the concept of credit multiplier. Unit 10 describes the meaning, types, causes and effects of inflation. Here we will distinguish between demand-pull and cost-push inflation and try to outline the different anti-inflationary measures. In Unit 11 we will discuss the meaning, causes and effects of deflation. Here we will explain the different anti-deflationary measures and make a comparative analysis between inflation and deflation. The concept of stagflation is also introduced in this unit. Unit 12 deals with the concept of monetary policy adopted by Central bank. In this unit we will illustrate the various goals, targets and instruments of monetary policy and try to know the effects of monetary policy at times of inflation and deflation. Unit 13 deals with financial system. In this unit we will discuss the meaning, components and role of financial system. Unit 14 discusses the capital markets. Here, we will explain the nature and broad divisions of capital market i.e. primary market and secondary market and how these markets operate. The concept of stock market and the stock exchange are also introduced in this unit. The last units of this block i.e. Unit 15 deals with the money market. In this unit instruments and role of money market is described. Here we will also try to understand the interrelation between money market and capital market.

While going through a unit, you will notice some along-side boxes, which have been included to help you to know some of the difficult, unseen terms. Again, we have included some relevant concepts in "LET US KNOW" along with the text. And, at the end of each section, you will get "CHECK YOUR PROGRESS" questions. These have been designed to self-check your progress of study. It will be better if you solve the problems put in these boxes immediately after you go through the sections of the units and then match your answers with "ANSWERS TO CHECK YOUR PROGRESS" given at the end of each unit.

UNIT 8 : COMMERCIAL BANKS

UNIT STRUCTURE

8.1 Learning Objectives

8.2 Introduction

8.3 Functions of Commercial Banks

8.4 Balance sheet of a Commercial Bank: Assets and Liabilities

8.5 Conflict between Liquidity and Profit

8.6 Let Us Sum Up

8.7 Further Reading

8.8 Answers to Check Your Progress

8.9 Model Questions

8.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- derive the meaning of commercial bank and what distinguishes it from other financial institutions
- discuss the various activities of commercial banks in a modern economy and how important they are in providing financial services to individuals, organizations and different sectors of the economy
- lay out the structure of the balance sheet of a commercial bank- their liabilities (i.e what they owe to others or what others can claim from them) and their assets (i.e their sources of income or their claims on income earning sources)
- state the issues involved in maintaining a healthy balance sheet.

8.2 INTRODUCTION

Commercial Banks refer to those banks which conduct a general rather than a specialized type of business. These are institutions that accept deposits of money from the public which are used for lending. Commercial banks are a very important source of institutional credit in

any modern economy. Apart from accepting deposits from and lending to public, the banks provide a wide variety services to their customers. Often commercial banks are called departmental stores of financial services. The sheer range of these services highlight the crucial role the commercial banks play in the economic life of a country. In this unit we study the important functions, and the major items of their liabilities and assets.

8.3 FUNCTIONS OF COMMERCIAL BANKS

Commercial banks perform certain invaluable functions in a modern economy. They perform such a wide variety of functions that it is not possible to make an exhaustive list of their functions and services. Nonetheless, some basic functions performed by commercial banks are described below:

- **Accepting Deposits:**Banks accept deposits from the general public. It attracts deposits from all sorts of individuals and groups or organizations. Broadly, these deposits are three types – current, savings, and fixed. These can further be reclassified under two main heads of demand and time deposits. From time to time a bank may introduce special deposit scheme tailored for different types of depositors.

- **Grant of Credit:** Grant of credit to all sectors of the economy is the second most important function of a bank. After keeping certain cash reserves, banks lend their deposits to the needy borrowers. This is done in various forms such as loans and advances, discounting of bills, and investment in open-market securities, both government and private.

- **Credit Creation:** Credit creation is a unique function of a bank. The function of credit creation distinguishes a bank from all other financial institutions. Whenever a bank grants a loan, it creates an equal amount of bank deposit. Creation of such deposits is called credit creation which results in a net increase in money stock of the economy. Banks have the ability to create credit many times more than their deposits and this ability to multiple credit creation depends upon the cash reserve ratio (i.e the amount of cash banks are required to keep against total deposits) of the banks.

- **Promoting Cheque System:** Banks also provide a very useful medium of exchange in the form of cheques. Through a cheque, the depositor directs the banker to make payment to the payee out of his deposit. In modern times, cheques are extensively used as a medium of exchange, including in the settlement of debts.

- **Agency Functions:** Banks also perform certain agency functions for and on behalf of their customers. Some of the important services rendered by the banks under these are :

  - *Remittances of Funds*: Banks help their customers in transferring funds from one place to another through cheques, drafts etc.

  - *Collection and Payments of Credit Instruments*: Banks collect and pay various credit instruments like cheques, bills of exchange, promissory notes etc.

  - *Execution of Standing Orders*: Customers can give standing instructions to banks for various periodic payments on their behalf and banks execute them. They make payments for subscription, rents, insurance premium etc. on behalf of their customers.

  - *Purchase and Sale of Securities*: Banks undertake sale and purchase of various securities like shares, stocks, debentures etc. on behalf of their customers. They also collect dividends, interests on shares and debentures for their customers.

  - *Acting as Trustee and Executor:* Banks also become custodian of 'Wills' of their customers, when requested for, and execute them as per the instruction of the customers.

  - *Investment Services:* Sometime banks also provide special investment services as underwriters and bankers for new securities to the public. In selected cases, banks also arrange for the private placement of securities.

- ***General Utility Functions*:** Most modern banks provide certain general utility services such as follows :

  - *Locker Facility*: By providing locker facility the banks enable their customers to keep important documents and other valuables in their locker for safe custody.

- *Letter of Credit*: Banks issue letter of credit to their customers certifying their credit worthiness. These are very useful in trade and business.

- *Collection of Statistics:* Banks collect statistical data relating to industry, trade and commerce etc. They also publish journals and bulletins containing research articles on economic and financial matters.

- *Acting as Referee:* Banks may be referred for seeking information regarding the financial position, business reputation and respectability of their customers.

- *Foreign Exchange Business:* Banks also deal in the business of foreign currencies. They may also finance foreign trade by discounting foreign bills of exchange.

- *Traveler's and Gift Cheques :* Banks issue travelers cheques against cash so that their customers can travel without the fear of theft or loss of money. Some banks also issue cheques of various denominations, such as Rs.51, Rs.101, Rs.1001, etc. to be used on auspicious occasions.

- *ATM Service:* To facilitate withdrawal of money 24X7 and outside the bank, now a days banks instal automated teller machines (ATM) in different parts of a city, town, or village. ATM is an electronic telecommunications device that enables the customers of a bank to perform financial transactions, particularly cash withdrawal, without the need for a human cashier or bank teller. Using an ATM, customers can access their bank deposit or credit accounts in order to make a variety of transactions such as cash withdrawals, check balances, or even transfer money to another account.

8.4 BALANCE SHEET OF A COMMERCIAL BANK: ASSETS AND LIABILITIES

As financial intermediaries banks deal mainly in financial assets. This is reflected in their balance sheets. A balance sheet is a statement of the bank's assets and liabilities at a particular time. Assets refer

to all the credit items representing the bank's claim on others and its ownership of wealth. Liabilities, on the other hand, refer to all debit items representing the obligation of the bank or others claims on the bank. In a balance sheet, the total assets and total liabilities are always equal. A typical balance sheet of a bank with important components of assets and liabilities are presented in the following table.

Table 8.1 Assets and Liabilities of a Commercial Bank

Liabilities	Assets
1. Share Capital 2. Reserve Fund 3. Deposits a) Demand deposits b) Time Deposits c) Saving Deposits 4. Borrowing from other banks 5. Acceptance and Endorsements 6. Other Liabilities	1. Cash a) Cash in hand b) Cash with central bank c) Cash with other banks 2. Money at call and short notice 3. Bills purchased or discounted 4. Investments 5. Loans and advances 6. Acceptance and endorsement 7. Building and other fixed assets
Total	

Liabilities of banks:

- **Share Capital** represents the paid up capital. It is the amount of share capital actually contributed by the owners of the bank.
- **Reserves** are undistributed profits accumulated over their working lives.
- **Deposits** from the public constitute the major portion of the bank's working capital. Banks accept demand deposits, time deposits and saving deposits. Deposits are liabilities of banks as the depositors have the right to withdraw part or whole of the money kept in his account.
- **Borrowing from Banks** are the loans taken from taken from other banks on a temporary basis to meet the increased demand for money. Central Bank is the lender of the last resort and provides

loan facilities to a bank under special circumstances. All these borrowings form the liabilities of the borrower bank.

- **Accepting or Endorsing** the bills of exchange on behalf of customers create liabilities for the bank. Through this facility the bank assumes the liability to pay the amount of the bill on maturity.
- **Other Liabilities** refer to miscellaneous liabilities assumed by the bank. For example, by acting as an agent a bank makes collection on behalf of customers and thus creates liabilities. Again, the profits earned by the bank represent a liability because they are payable to customers.

Assets of Banks:

- **Cash** is the most liquid but non earning asset and is considered as the first line of defense. Every bank keeps certain amount of cash to meet the cash requirement of its depositors. Cash of the bank includes three items :
  - Currency and coins in hand;
  - Currency and coins kept with the central bank;
  - Currency and coins kept with other bank.
- **Money at Call and Short Notice** refers to loans which are recoverable by the bank on demand or at a very short notice. These loans are for maximum period of 15 days. Such loans are liquid as well as an earning source which can be converted into cash without loss.
- **Bills Purchased or Discounted** on behalf of the customers also constitute assets of a bank as the amount of the bill is collected by the bank on maturity. The difference between the purchase price and the value on maturity of the bill is the earning of the bank.
- **Investments** made by banks mainly consist of buying of profit yielding assets such as government securities. Banks also invest in fixed interest earning debentures or bonds of well established industrial concerns.
- **Loans and Advances** *are* the most profitable and least liquid asset of a bank. Banks provide loans and advances to the business either through overdraft or by discounting bills of exchange. While loans are for long periods, advances are given for a shorter period.

- **Building and Other Fixed Assets** are the movable and immovable properties of banks. These assets do not contribute to the income of the bank and constitute only a small portion of total assets of a bank.



CHECK YOUR PROGRESS

Q1: What is a commercial bank? (Answer in about 40 words)

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Q2: What feature distinguishes a commercial bank from other financial institutions? (Answer in about 30 words)

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Q3: State two important functions of a commercial bank. (Answer in about 50 words)

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Q4: What do you mean by the assets and liabilities of a commercial bank? (Answer in about 40 words)

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Q5: What is an ATM ? (Answer in about 50 words)

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8.5 CONFLICT BETWEEN LIQUIDITY AND PROFIT

Commercial banks are profit seeking organizations. The ways the commercial banks handle their portfolio determine the profit in their books. Portfolio management is all about how the commercial banks handle their assets and liabilities. Portfolio management refers to the management of assets and liabilities in such a way that the profits are maximized. Though banks want to make profits but at the same time they are concerned about liquidity and safety.

Banks have to earn profits because if they don't their shareholders would sell off the shares if proper dividends are not earned. Hence they have to earn profits for their shareholders and at the same time satisfy the withdrawal needs of its customers. The main problem here comes is how to strike a balance between liquidity and profitability as both contradict each other. This is the trade-off between liquidity and profitability.

The liquidity and, thereby, safety will be maximum only if the banks keep high amount of cash against the deposits they have held. But if they do this, this will not bring any profits for the banks as nothing would be invested. Thus, if the bank goes for maximum safety then they will have to sacrifice the profitability objective. Similarly if they go other way round that is they only keep on investing and try to increase the profitability factor than they will have the problem if customer demands for cash. Hence it is very difficult for the banks to reconcile the twin objective of profitability and liquidity.

Economists have tried to resolve these conflicts by laying down certain theories from time to time. These principles or theories govern the distribution of assets keeping in view the conflicting objectives. They have also come to be known as the theories of liquidity management which are discussed in the following:

- **The Real Bills Doctrine:**The real bills doctrine, also known as the commercial loan theory, states that a commercial bank should advance only short-term self-liquidating productive loans to business firms. Self-liquidating loans are those which are meant to finance the production, and movement of goods through the successive stages of production, storage, transportation, and distribution.When such

goods are ultimately sold, the loans get liquidated automatically. For example, a loan give by the bank to a businessman to finance inventories would be repaid out of the receipts from the sale of those very inventories, and the loan would be automatically self-liquidated.

- **The Shiftability Theory:** This theory of bank liquidity was propounded by H.G. Moulton who argued that if the commercial banks maintain a substantial amount of assets that can be shifted on to the other banks for cash without material loss in case of necessity, then there is no need to rely on maturities of assets. It is to be noted that an asset to be perfectly shiftable must be immediately transferable without capital loss when the need for liquidity arises. This is particularly applicable to short term market investments, such as treasury bills and bills of exchange which can be immediately sold whenever it is necessary to raise funds by banks. But in a general crisis when all banks are in need of liquidity, the shiftability theory requires that all banks should possess such assets which can be shifted on to the central bank which is the lender of the last resort. This theory can be related to certain actual practices prevalent now in the banking system. Banks now accept sound assets which can be shifted on to other banks. Shares and debentures of large companies are accepted as liquid assets along with treasury bills and bills of exchange. This has encouraged term lending by banks.

- **The Anticipated Income Theory:** The anticipated income theory was developed by H.V. Prochanow in 1944 on the basis of the practice of extending term loans by the US commercial banks. According to this theory, regardless of the nature and character of a borrower's business, the bank plans the liquidation of the term-loan from the anticipated income of the borrower. A term-loan is for a period exceeding one year. It is granted against the hypothecation of machinery, stock and even immovable properties of the borrower. The bank also puts restrictions on the financial activities of the borrower while granting this loan. At the time of granting a loan, the bank takes into consideration not only the security but also the anticipated earnings of the borrower. The arrangement is made in such a way that the loan by the bank gets repaid out of the future income of the borrower in instalments, instead of in a lump sum at the maturity of the loan.

- **The Liabilities Management Theory:** This theory was developed in the 1960s. According to this theory, there is no need for banks to grant self-liquidating loans and keep liquid assets because they can borrow reserve money in the money market when there is a need. A bank can mobilise reserves by creating additional liabilities against itself from different sources. These sources include the issuing of time certificates of deposit, borrowing from other commercial banks, borrowing from the central bank, raising of capital funds by issuing shares, and by ploughing back of profits. We are presenting these sources of bank funds briefly in the following:

  - **Time Certificates of Deposits:** These are the principal source of reserve money for a commercial bank in some developed countries, such as the USA. Time certificates of deposits are of different maturities ranging from 90 days to less than 12 months. They can be bought and sold in the money market. So a bank can have access to liquidity by selling them in the money market. But there are two limitations.First, if during a boom; the interest rate structure in the money market is higher than the ceiling rate set by the central bank, time deposit certificates cannot be sold in the market. Second, they are not a dependable source of funds for the commercial banks. Bigger commercial banks are at an advantage in selling these certificates because they have large certificates which they can afford to sell at even low interest rates. So the smaller banks are at a disadvantage in this respect.

  - **Borrowing from other Commercial Banks:** A bank may create additional liabilities by borrowing from other banks with excess reserves. But such borrowings are only for a very short duration, for a day or week at the most. The interest rate of such borrowings depends upon the prevailing rate in the money market. But borrowings from other banks are only possible during normal economic conditions. In abnormal times, no bank can afford to lend to others.

  - **Borrowing from the Central Bank:** Banks also create liabilities on themselves by borrowing from the central bank of the country. They borrow to meet their liquidity needs for short term and by

discounting bills from the central bank. But such borrowings are relatively costlier than borrowings from other sources.

- **Raising Capital Funds:** Commercial banks acquire funds by issuing fresh shares or debentures. The availability of funds through these sources depends on the amount of dividend or interest rate which the bank is prepared to pay. Usually the banks are not in a position to pay rates higher than what is paid by manufacturing and trading companies. So may not be able to get sufficient funds from these sources. The saleability of the instruments also depend crucially on the state of the economy at the time of selling.

- **Ploughing Back Profits:** Another source of liquid funds for a commercial bank is the ploughing back of its profits. The amount it can get from this source will depend upon the quantum of profit and the declared dividend policy. Typically larger banks can depend on this source rather than the smaller banks.



CHECK YOUR PROGRESS

Q 6: What is the conflict between the liquidity and profitability objectives of a commercial bank?

(Answer in about 50 words)

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Q 7: What are the principal theories of liquidity management?

(Answer in about 30 words)

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8.6 LET US SUM UP

- Commercial Banks refer to those banks which conduct a general rather than a specialized type of business. These are institutions that accept deposits of money from the public which are used for lending.
- Commercial banks perform certain invaluable functions in a modern economy. They perform a wide variety of functions that include acceptance of deposits, granting of credit, creation of credit, agency functions as well as certain utility functions.
- As financial intermediaries commercial banks deal mainly in financial assets.
- A balance sheet is a statement of the bank's assets and liabilities at a particular time.
- Assets refer to all the credit items representing the bank's claim on others and its ownership of wealth. Liabilities, on the other hand, refer to all debit items representing the obligation of the bank or others claims on the bank.
- In a balance sheet, the total assets and total liabilities are always equal.
- Assets of a bank include cash, money at call, discounted bills, investments, loans and advances, movable and immovable properties and so on. The liabilities include share capital, deposits, reserve, borrowing from other banks and so on.
- Commercial banks are profit seeking organizations. The way the commercial banks handle their portfolio determine the profit in their books. Portfolio management is all about how the commercial banks handle their assets and liabilities. Portfolio management refers to the management of assets and liabilities in such a way that the profits are maximized.
- Though banks want to make profits but at the same time they are concerned about liquidity and safety. Banks have to earn profits because if they don't their shareholders would sell off the shares if proper dividends are not earned. Hence they have to earn profits for their shareholders and at the same time satisfy the withdrawal needs of its customers. The main problem here comes is how to strike a balance

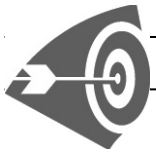
between liquidity and profitability as both contradict each other. This is the trade-off between liquidity and profitability.

- Economists have tried to resolve the conflicts between liquidity and profitability by laying down certain theories from time to time. These principles or theories govern the distribution of assets keeping in view the conflicting objectives. They have also come to be known as the theories of liquidity management. Some of the main theories are : the real bills doctrine, the shiftability theory, the anticipated income theory, and the liabilities management theory.



8.7 FURTHER READING

- Gupta, S. B. (1999). *Monetary Economics – Institutions, Theory and Policy*. New Delhi: S.Chand and Company Ltd.
- Paul, R.R. (1996). *Monetary Economics*. Ludhiana: Kalyani Publishers.



8.8 ANSWERS TO CHECK YOUR PRGRESS

Ans. to Q No 1: Commercial Banks refer to those banks which conduct a general rather than a specialized type of business. These are institutions that accept deposits of money from the public which are used for lending.

Ans. to Q No 2: Commercial banks are the only financial institutions that have the ability to create credit. This distinguishes them from all other financial institutions.

Ans. to Q No 3: Two important functions of a commercial bank are:

a) Banks accept deposits from the general public. It attracts deposits from all sorts of individuals and groups or organizations.

b) Grant of credit to all sectors of the economy is the second most important function of a bank. After keeping certain cash reserves, banks lend their deposits to the needy borrowers.

Ans. to Q No 4: Assets refer to all the credit items representing the bank's claim on others and its ownership of wealth. Liabilities, on the other hand,

refer to all debit items representing the obligation of the bank or others claims on the bank.

Ans. to Q No 5: ATM is an electronic telecommunications device that enables the customers of a bank to perform financial transactions, particularly cash withdrawal, without the need for a human cashier or bank teller. Using an ATM, customers can access their bank deposit or credit accounts in order to make a variety of transactions such as cash withdrawals, check balances, or even transfer money to another account.

Ans. to Q No 6: The commercial banks should maintain adequate funds to meet the withdrawal requirement of the depositors. So they need to keep liquid funds with them. At the same time, being a profit making enterprise, they need to make sufficient investment by utilising the deposited money to make a decent profit. The main problem here comes is how to strike a balance between liquidity and profitability as both contradict each other. This is the trade-off between liquidity and profitability.

Ans. to Q No 7: The principal theories associated with the liquidity management are:

a) The real bills doctrine,

b) The shiftability theory,

c) The anticipated income theory, and

d) The liabilities management theory.



8.9 MODEL QUESTIONS

Short Questions (Answer each question in about 150 words)

Q1: What is a commercial bank?

Q2: Distinguish the assets of a bank from its liabilities.

Q3: Mention some of the agency functions of commercial banks.

Q4: Mention some of the general utility services provided by the commercial banks to their customers.

Essay- type Questions (Answer each question in 300-500 words)

Q 1: Discuss the important functions performed by commercial banks in a modern economy.

Q 2: Prepare a balance sheet of a commercial bank showing the main components of assets and liabilities.

Q 3: Discuss the conflict between the twin objectives of liquidity and profitability of commercial banks.

Q 4: Explain the various theories associated with the liquidity management of commercial banks

** ***** **

UNIT 9: CREDIT CREATION BY COMMERCIAL BANKS

UNIT STRUCTURE

9.1 Learning Objectives

9.2 Introduction

9.3 Credit Creation by Commercial Banks

9.4 Limitations of Credit Creation

9.5 Let Us Sum Up

9.6 Further Reading

9.7 Answers to Check Your Progress

9.8 Model Questions

9.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- understand the basis of credit creation by the commercial banks
- explain the process of credit creation
- define the concept of credit multiplier
- outline the limitations to credit creation.

9.2 INTRODUCTION

The ability to create credit distinguishes a bank from all other financial institutions. Credit creation is a function unique to a commercial bank. Banks have learnt from experience that at any point of time not all of their deposits are going to be withdrawn. In fact a huge fraction of their deposits would lie with them which they can utilise for advancing loans etc. In other words, banks turn part of their liabilities (deposits) into assets (loans) and thereby earn an income. This is the origin of credit creation. In this unit we are discussing this process of credit creation with simple illustrations. What is shown is that the process can be seen in simple mathematical language whereby we can exactly predict the quantum of credit created with an initial amount of deposit made by the public.

Before we take up the core issue of this unit we need to clarify the distinction between a central bank and a commercial bank. In the previous units we have stated the functions of both the central bank and commercial banks. We have stated that the central bank has the monopoly of note issue and it controls the supply of money. We also know that commercial bank has the unique distinction of being creator of credit. Credit is a component of money supply in the economy. Thus there may be a confusion in this regard between the status of a central bank and a commercial bank. In this context it becomes important to clearly spell out the differences between the two. We are presenting this in the following passages.

The Basic Differences between a Central Bank and a Commercial Bank are as follows:

- The central bank is the apex monetary institution, which has been specially empowered to exercise control over the banking system of the country. The commercial bank, on the contrary, is a constituent unit of the banking system.
- The central bank does not operate with a profit motive. The primary aim of the central bank is to achieve the objectives of the economic policy of the government and maximise the public welfare through monetary measures. The commercial banks, on the other hand, have profit earning as their primary objective.
- The central bank is generally a state-owned institution, while the commercial banks are normally privately owned institutions.
- The central bank does not deal directly with the Public. The commercial banks, on the contrary, directly deal with the public.
- The central bank does not compete with the commercial banks. Rather it helps them by acting as the lender of the last resort.
- The central bank has the monopoly of note-issue, whereas the commercial banks do not enjoy such right.
- The central bank is the custodian of the foreign exchange reserves of the country. The commercial banks are only the dealers in foreign exchange.

- The central bank acts as the banker to the government, the commercial banks act as bankers to the general public.

- The central bank acts as the bankers' bank : (a) The commercial banks arc required to keep a certain proportion of their reserves with central bank ; (b) the central bank helps them at the time of emergency ; and (c) the central bank acts as the clearing house for the commercial banks. But, the commercial banks perform no such function.

9.3 CREDIT CREATION BY COMMERCIAL BANKS

As we have already noted, commercial banks enjoy the unique ability to create credit. With the experience that not all the deposits are going to be withdrawn at the same time, banks need to keep only a small fraction of their total deposits in the form of cash. The rest they can utilize to extend loans to others. Banks extend loans by opening an account in the name of the borrower. The deposits created by depositors coming to the bank are called primary deposits. The deposits created by the bank while extending loans to borrowers are called secondary or derivative deposits.From a single primary deposit, multiple numbers of secondary deposits can be created. This is called credit creation.

We have already noted that credit creation is one of the important functions of a commercial bank. It constitutes the major component of money supply in the economy. Commercial banks differ from other financial institutions in this aspect. Other financial institutions transfer money from the lenders to the borrowers. Commercial banks, while performing the same function, create credit or bank money. Professor Sayers says, "Banks are not merely purveyors of money, but in an important sense, they are the manufacturers of money".

The process of credit creation occurs when banks accept deposits and provide loans and advances. When the customers deposit money with the bank, they are called primary deposits. This money will not be withdrawn immediately by them. Hence banks keep a certain amount of deposits as reserves which is known as cash reserve ratio and provide the balance amount as loans and advances. Thus, every deposit creates a loan. Commercial banks give loans and advances against some security to the public. But the bank does not give the

loan amount directly. It opens an account in the name of the borrower and deposits the amount in that account. Thus, every loan creates a deposit. The loan amount can be withdrawn by means of cheques. They create deposits while lending money also. These deposits created by banks with the help of primary deposits are called derivative deposits.

Customers use these loans to make payments. While paying they issue a cheque against these deposits. The person who receives the cheques, deposit it in another bank. For that bank, this will be the primary deposit. A part of the deposit will be kept as a reserve and the balance will be used for giving loans and advances. This process is repeated by other banks. When all the banks involve in this process, it is called Multiple Credit Creation.

In order to understand the credit creation process we need to elaborate certain important ideas and terms. This is done in the following passages:

- We need to understand that a bank is a *business institution* or a *commercial enterprise* which aims to *maximize profit* by extending loans and advances from the depositors' money.

- Bank deposits form the basis for credit creation. *Primary deposits* are used to create *derivative deposits* that start the process of credit creation.

- Out of the total primary deposits banks keep only a fraction in the form of cash. This fraction is decided by the central bank of the country. This fraction is called *cash reserve ratio (CRR).*

- The amount of cash that banks are left with after the deduction of the required cash reserve is called *excess reserve.* It is the excess reserve out of which loans are granted and credit is created.

- The ratio between the total amount of derivative deposits and the initial amount of excess reserve is known as the *credit multiplier*. If the initial excess reserve of Rs.900/ produces total derivative deposits of Rs.9000/, then the credit multiplier is 10.

Credit Multiplier = Total derivative deposits/ Initial excess reserve

= Rs.9000/ Rs.900 = 10

Now let us explain the process of credit creation with the help of a simple example. In the example we are assuming that the CRR in the banking system is 10%.

Let us suppose that Mr. A deposits an amount of Rs.1000/ with the State Bank of India (SBI). Accordingly the balance sheet of the SBI will be as follows:

SBI	
Liabilities	Assets
Primary Deposit (PD) Rs.1000/	Cash Received : Rs.1000/ Cash Reserve : Rs.100/ (10% of Rs.1000/) Excess Reserve : Rs.900/

In the above table we see that out of Rs.1000/ the SBI has an excess reserve of Rs.900/ which it uses to extend loans. It does so by opening an account of Rs.900/ in the name of Mr. Y who comes to the bank to take a loan. Then the balance sheet of the SBI will be as follows:

SBI	
Liabilities	Assets
Primary Deposit (PD): Rs.1000/ Derivative Deposit (DD) : Rs.900/	Cash Received : Rs.1000/ Loans : Rs.900/

Now let us suppose that Mr. Y deposits his cheque in the Union Bank of India (UBI). Then the balance sheet of the UBI will be as follows:

UBI	
Liabilities	Assets
Primary Deposit (PD) Rs.900/	Cash Received : Rs.900/ Cash Reserve : Rs.90/ (10% of Rs.900/) Excess Reserve : Rs.810/

Now the UBI will utilize the excess reserve Of Rs.810/ to give loans. Let us suppose that it extends a loan of Rs.810/ to Mr. Z by opening an account in his name. Then the balance sheet of the UBI is modified as follows:

UBI	
Liabilities	Assets
Primary Deposit (PD): Rs.900/ Derivative Deposit (DD) : Rs.810/	Cash Received : Rs.900/ Loans : Rs.810/

Now let us suppose that Mr. Z deposits the cheque of Rs.810/

with the Punjab National Bank (PNB) . Then the balance sheet of the PNB will look like as follows:

PNB	
Liabilities	Assets
Primary Deposit (PD) Rs.810/	Cash Received : Rs.810/ Cash Reserve : Rs.81/ (10% of Rs.810/) Excess Reserve : Rs.729/

Now the PNB will extend loan of Rs.729/ to, say, Mr. W. Accordingly its balance sheet will be modified as follows :

PNB	
Liabilities	Assets
Primary Deposit (PD): Rs.810/ Derivative Deposit (DD) : Rs.729/	Cash Received : Rs.810/ Loans : Rs.729/

The above process will go on as long as banks enjoy excess reserve in its coffers against deposits. We can apply the knowledge of arithmetic to get the total amount of derivative deposits (DD) in our example.

Aggregate DD = Rs.900/ + Rs.810/ + Rs.729/ + ……

Now we observe that the above constitutes a Geometric Progression (GP) series with 0.9 (1-0.1) as the common factor. The aggregate DD can be written as:

Aggregate DD = $900 + 900 (1-0.1) + 900 (1-0.1)^2 + 900 (1-0.1)^3 + \ldots\ldots$

$= 900 / 1- (1-0.1)$

$= 900/0.1$

= Rs.9000/

Thus we observe that the initial derivative deposit of Rs.900/ has created total derivative deposit of Rs.9000/. Thus there is an expansion of 10 times. This is multiple credit creation. The credit multiplier is, therefore, 10. We may generalize the formula of ***credit multiplier*** as follows:

Credit Multiplier = Total derivative deposits/ Initial excess reserve

= Rs.9000 / Rs.900

= 10

= 1/10%

= 1 / CRR



Credit multiplier = $\frac{1}{CRR}$

Hence the credit multiplier is the inverse of the cash reserve ratio (CRR). With CRR at 10%, the credit multiplier is 10. So when the initial excess reserve is Rs.900, total credit created will be Rs.9000 (Rs.900X10). When the CRR is 8%, the credit multiplier is 1/8%= 12.5. Thus with an initial excess reserve of Rs.900 the total credit created will be Rs.11,250 (Rs.900X12.5). Thus, it can be inferred that the lower the CRR, the higher will be the credit creation, whereas the higher the CRR is, the lesser will be the credit creation.

To Explain the Process of Credit Creation as above, We have made the following Assumptions:

- There are many banks, such as State Bank India, United Bank of India, Punjab National Bank and so on in the banking system.
- Each bank has to keep 10 percent of its deposits in reserves. In other words, 10 per cent is the required ratio fixed by law.
- The first bank has Rs. 1000 as deposits.
- 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.
- Each bank starts with the initial deposit which is deposited by the debtor of the other bank.

From the above discussion we can infer that the the essential conditions for creation of credit are as follows:

- Accepting the fresh deposits from public
- Willingness of banks to lend money
- Willingness of borrowers to borrow.

9.4 LIMITATIONS OF CREDIT CREATION

Although credit creation is a unique function of commercial banks, its power to do so is not unlimited. It faces certain limitations that are briefly noted below:

- **Amount of Cash**: The base of credit creation is the primary deposit, in the creation of which the banks have no active role to play. It can

open a primary deposit account only when depositors come to the bank to open it. The higher is the primary deposit, the larger will be the credit creation and vice versa.

- **Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR**): The credit multiplier is the inverse of the CRR . Thus the higher is the CRR, the smaller will be the credit creation. Similarly, the SLR will also determine how much of cash is with the commercial bank for the purpose of giving as loans. The higher is the SLR the lower will be the money available for loans and there by,the less will be the credit creation.

- **External Drain**: External drain refers to the cash withdrawn from the banking system by the public. Holders of the deposits may withdraw some amount in cash. This will reduce the excess reserve and lower the credit creating capacity of the bank.

- **Willingness**: Banks can create derivative deposits by extending loans only when there are willing borrowers. But if there is no demand for loans, excess reserve can not be utilized and credit creation can not take place.

- **Banking Habits**: If people prefer to transact by cash and not by cheques, then multiple credit creation will not be possible. The banking habit will become popular only when there is sound and developed banking system.

- **Supply of Collateral Securities**: Every loan extended by a bank is secured by some form of wealth such as shares, stocks, bills etc. Thus the power of the bank to turn liquid assets into money depends on the volume of such assets with the borrowers. If approved securities are not adequately available, banks can not offer loans and hence can not create credit. According to Crowther, “the bank does not create money out of thin air; it transmutes other forms of wealth into money.”

- **Monetary Policies:** The central bank has the power to influence the volume of money in the country. It uses various measures of credit control which affect the process of credit expansion by the banking system.

- **Excess Reserves:** This occurs generally when the economy is moving towards recession. In such a case, banks may decide to

maintain reserves instead of utilizing funds for lending. Therefore, in such situations, credit created by commercial banks would be small as a large amount of cash is reserved.

- **Business Conditions**:It is observed that credit creation is influenced by the cyclical nature of an economy. For example, credit creation would be small when the economy enters into the depression phase. This is because in depression phase, businessmen do not prefer to invest in new projects. In the other hand, in prosperity phase, businessmen approach banks for loans, which lead to credit creation.



CHECK YOUR PROGRESS

Q 1: Distinguish between primary and derivative deposits. (Answer in about 30 words)

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Q 2: What is credit multiplier? .(Answer in about 30 words)

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Q 3: State the relationship between credit multiplier and the CRR. .(Answer in about 40 words)

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Q 4: State two limitations to credit creating capacity of a commercial bank. .(Answer in about 50 words)

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Q 5: What are the basic differences between commercial bank and central bank? .(Answer in about 70 words)

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9.5 LET US SUM UP

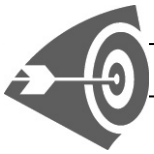
- Commercial Banks enjoy the unique ability to create credit. In fact this function distinguishes them from all other financial institutions. They do it by creating derivative deposits by drawing from primary deposits.
- The deposits created by depositors coming to the bank are called primary deposits. The deposits created by the bank while extending loans to borrowers are called secondary or derivative deposits**.** From a single primary deposit, multiple numbers of secondary deposits can be created. This is called credit creation.
- Out of the total primary deposits banks keep only a fraction in the form of cash. This fraction is decided by the central bank of the country. This fraction is called cash reserve ratio (CRR).
- The amount of cash that banks are left with after the deduction of the required cash reserve is called excess reserve. It is the excess reserve out of which loans are granted and credit is created.
- The ratio between total amount of derivative deposits and the initial amount of excess reserve is known as the credit multiplier. The credit multiplier is the inverse of the cash reserve ratio (CRR). Thus it can be inferred that the lower the CRR, the higher will be the credit creation, whereas the higher the CRR is, the lesser will be the credit creation.
- The essential conditions for creation of credit by commercial banks are : accepting the fresh deposits from public, willingness of banks to lend money and willingness of borrowers to borrow.

- Commercial banks' ability to create credit is not unlimited. The amount of credit creation depends on cash, CRR, willingness of the borrowers, monetary policy of the central bank, availability of securities, external drain , banking habit and so on.



9.6 FURTHER READING

- Gupta, S. B. (1999). *Monetary Economics – Institutions, Theory and Policy*. New Delhi: S.Chand and Company Ltd.
- Paul, R.R. (1996). *Monetary Economics*. Ludhiana: Kalyani Publishers.



9.7 ANSWERS TO CHECK YOUR PRGRESS

Answer to Q No 1: The deposits created by depositors coming to the bank are called primary deposits. The deposits created by the bank while extending loans to borrowers are called secondary or derivative deposits.

Answer to Q No 2: The ratio between the total amount of derivative deposits and the initial amount of excess reserve is known as the credit multiplier. It can be calculated as the inverse of the CRR.

Answer to Q No 3: The credit multiplier is the inverse of the cash reserve ratio (CRR). Thus, Credit Multiplier = 1/CRR

Answer to Q No 4: Two limitations to credit creating capacity of a commercial bank are:

- Amount of cash: The base of credit creation is the primary deposit, in the creation of which the banks have no active role to play. It can open a primary deposit account only when depositors come to the bank to open it. The higher is the primary deposit, the larger will be the credit creation and vice versa.
- Cash Reserve Ratio (CRR): The credit multiplier is the inverse of the CRR . Thus the higher is the CRR, the smaller will be the credit creation.

Answer to Q No 5: The basic differences between commercial bank and central bank are:

- The central bank is the apex monetary institution, which has been specially empowered to exercise control over the banking system of the country. The commercial bank, on the contrary, is a constituent unit of the banking system.
- The central bank does not operate with a profit motive. The commercial banks, on the other hand, have profit earning as their primary objective.
- The central bank is generally a state-owned institution, while the commercial banks are normally privately owned institutions.
- The central bank does not deal directly with the Public. The commercial banks, on the contrary, directly deal with the public.
- The central bank does not compete with the commercial banks. Rather it helps them by acting as the lender of the last resort.



9.8 MODEL QUESTIONS

Short Questions (Answer each question in about 150 words)

Q1: What is the relationship between credit multiplier and CRR ?

Q2. How does the banking habit of people limit the credit creation of commercial banks ?

Q3. What is a credit multiplier ?

Q4. What are the essential conditions for creation of credit ?

Essay- type Questions (Answer each question in 300-500 words)

Q1. Explain how a commercial bank creates credit.

Q2. What restricts a commercial bank from limitlessly creating credit ?

Q3. Distinguish between the central bank and the commercial banks of a country.

Q4. Explain the role of credit multiplier in the process of credit creation of commercial banks.

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UNIT 10: INFLATION

UNIT STRUCTURE

10.1 Learning Objectives

10.2 Introduction

10.3 Inflation

10.3.1 Meaning and Definition of Inflation

10.3.2 Types and Theories of Inflation

10.4 Effects of Inflation and Anti-Inflationary Measures

10.4.1 Effects of Inflation

10.4.2 Anti-Inflationary Measures

10.5 Structural Inflation

10.6 Let Us Sum Up

10.7 Further Reading

10.8 Answers to Check Your Progress

10.9 Model Questions

10.1 LEARNING OBJECTIVES

After going through this unit, you will be able to :

- put forward the meanings of the term 'inflation' and discuss its different types
- discuss the causes that give rise to inflation in an economy, and also delineate its effects
- explain the demand-pull and cost-push inflation
- explain different anti-inflationary measures
- discuss the concept of structural inflation.

10.2 INTRODUCTION

In the earlier units , we have discussed about money. From these units you have already known that increased money supply in economy causes inflation. Thus, *inflation* is a monetary phenomenon characterized by rising prices. However, it is to be noted that inflation is a complex phenomenon

and hence it can not be precisely defined. In this unit, we shall try to look at some of the important definitions of inflation. We shall also discuss its various types, causes and the important anti-inflationary measures.

10.3 INFLATION

As we have already stated, *inflation* is a monetary phenomenon characterized by rising prices. However, the phenomenon inflation is very complex, and hence it can not be precisely defined. In this section, we shall try to derive the meaning of inflation and discuss a few important definitions of it.

10.3.1 Meaning and Definition of Inflation

Inflation is characterized by *rising prices*. Here, the phrase *rising prices* is important. This is because inflation denotes a situation where the prices are rising continuously and not for once only. Thus, a sudden increase in the ***price level*** of the economy will not be termed as inflation, unless it is experienced on a continuous basis. However, it is also true that there can be inflation even without a rise in the price level. This type of inflation may occur during a war period. On account of many controls and rationing that exist during war time, prices will be kept under check. But the moment controls are withdrawn, prices will go up. So the real test of inflation is neither an increase in the amount of money nor a rise in prices, but the appearance of abnormal profits. Whenever businessmen and producers make huge profits, it is a sign of inflation.



Price level: The general level of prices in an economy. It refers to consumer goods prices (this is measured by retail price index) or to all goods produced, including investment and government purchses as well as consumer goods (this is measured by a GDP deflator); GDP deflator is a tool to assess whether there has been a real rise or fall in GDP from one year to another year.)

Definition of Inflation: As we have repeatedly noted, inflation is a complex, multi-dimensional phenomenon. Many economists have tried to define it; but often they end up highlighting on certain aspects while leaving aside others. Therefore, it is very difficult to put forward an all acceptable definition of inflation. Even then, we shall discuss some of the important definitions of this term.

Crowther has defined the term in these simple words: *"Inflation is a state in which the value of money is falling, i.e,*

prices are rising". So it is generally regarded that during a period of inflation, the price level will rise. It is also described as a situation where too much money chases too few goods resulting in an abnormal increase of price level. Ackley has defined inflation as *"a persistent and appreciable rise in the general level or average of prices"*. **Milton Friedman** has defined it as a process of *"a steady and sustained rise in prices"*.

10.3.2 Types and Theories of Inflation

In general, based on the four types of inflation, four theories of inflation exist: a) Demand-pull inflation, b) Cost-push inflation, c) Mixed demand-pull cost-push inflation and d) Sectoral-demand shift theory. In this unit, we shall basically deal with the first two theories of inflation.

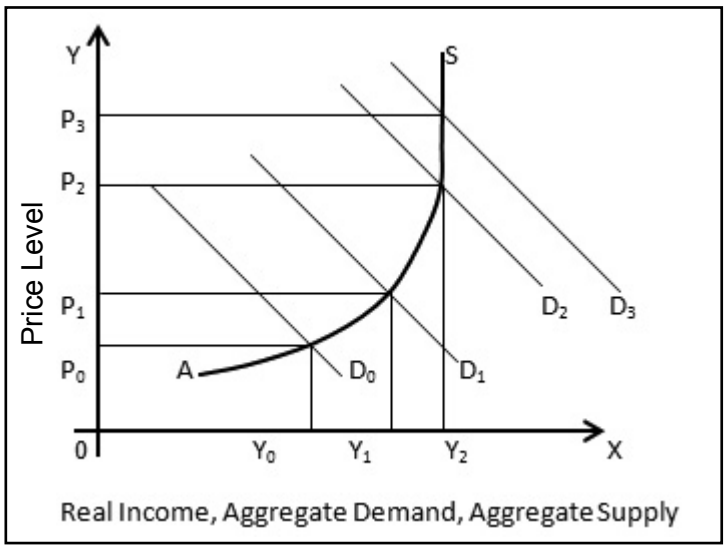
Demand – Pull Inflation: This type of inflation is loosely described as *"too much money chasing too few goods"*. It refers to the situation where general price level rises because the demand for goods and services exceed the supply available at the existing prices.

Traditionally, classical economists viewed that increase in the supply of money is mainly responsible for inflation in the economy. Thus, according to them, rise in the price level is proportionate to the rise in quantity of money supply. For example, an increase in the quantity of money supply by 5% raises the price level by 5%. Keynes however, rejected such direct and proportionate relationship between the quantity of money and level of aggregate demand. It is to be noted here that there exists three major approaches to the demand pull theory of inflation; viz., (a) the excess demand analysis, (b) Keynes' inflationary gap analysis and (c) Bent Hansen's demand inflation theory. In this unit, we shall, however, utilise only the excess demand analysis and Keynes' inflationary gap analysis to explain the demand-pull theory of inflation.

Excess Demand Analysis Approach: This approach views inflation as the process of rising prices initiated and

sustained by excess of demand for goods and services over the level of their supply. The concept can be explained with the help of figure 10.1.

Figure 10.1: Demand-pull Inflation

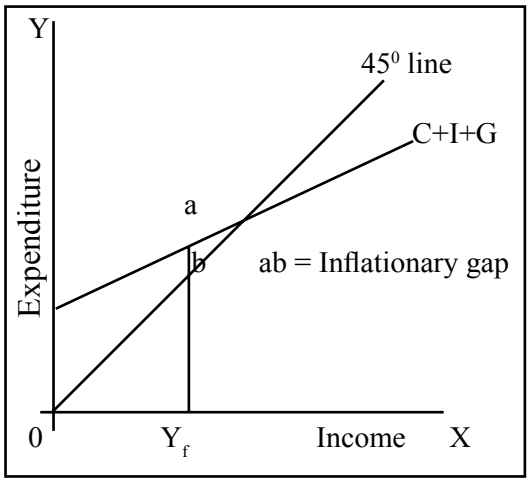


In the above figure 10.1, the price level has been shown in the Y-axis, while real income has been depicted on the X-axis. Here, D_0, D_1 and D_2 are the aggregate demand curves, while AS represents the aggregate supply function. It can be seen from the figure that as the level of real income increases, the level of aggregate demand also rises. Thus, as real income rises from Y_0 to Y_1, the level of aggregate demand rises from D_0 to D_1. As a result, price level increases from P_0 to P_1. However, it is to be noted that, as level of aggregate demand rises as a consequence to the rise in the level of real income,aggregate supply rises as well. Finally, the stage comes when aggregate supply can not increase further. This is the stage where the economy reaches the level of full employment. As level of full employment has been reached, the level of real income can not increase further. Thus, at this stage, supply will also not increase further; this will make the aggregate supply curve become parallel to the Y-axis. The significance of this situation is that given real income, any rise in aggregate demand further will only induce the price level to rise. This is what is known

as demand pull inflation.

Keynes' Inflationary Gap Analysis: This theory was developed by Keynes in his book, *'How to pay for the war'* in 1940.It is an application of the static aggregate demand model of his general theory to the situation of inflation.The notion of inflationary gap can be explained with the help of conventional Keynesian cross diagram.

Fig. 10.2: Keynes'Inflationary Gap



In the figure 10.2, the 45° line represents the income expenditure identity. The aggregate expenditure in the economy is represented by the line C+I+G. The full employment level of output or income is indicated by the point Y_f. At this level of income ,the aggregate expenditure is more than the value of output or aggregate supply by an amount given by the distance 'ab'.Thus 'ab' constitutes the excess demand that pushes up the general price level. Keynes calls this the *inflationary gap*. If the economy is placed in this situation, the excess demand will continue to cause prices to rise, because by assumption, output cannot be increased beyond Y_f.Thus, this is a demand pull inflation as prices are pulled up by the excess demand.

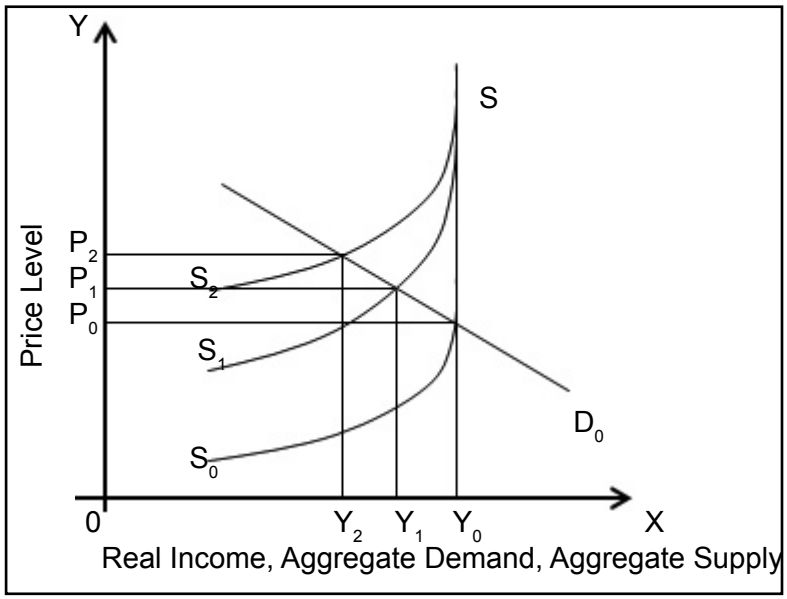
Cost–Push Inflation: According to the cost–push inflation approach, inflation is induced by rising costs. This approach to inflation became popular during and after the World War II. The underlying idea of this approach is that inflation may arise even in the absence of excess demand for goods and services. Thus, this theory propagates that

even in the absence of demand-pull situations, certain factors may push-up the cost of production and this increased cost of production may result in inflation. The factors that may push cost of production are basically three viz., (a) *increase in wage rates* (wage push inflation); (b) *increase in profits* (profit-push inflation) and (c) *increase in material cost* (*material cost* -push inflation). Now, let us discuss each of the approaches as followes:

Wage-Push Approach: Before discussing the wage-push approach to inflation in detail, let us consider some of its underlying propositions. First, this type of inflation is experienced in industries where the sellers can exercise great discretionary control in the formulation of pricing of products and wage rates. Secondly, increase in the wage rate is the result of persisting pressures of trade unions (and not for increase in their productivity). Let us suppose, the factory owner increases the price of the final product. This may be due to the increase in the price of inputs or increased wage rate. This increase in price of the goods and services will adversely affect the living standard of the labours. As a result, the labour union will pressurize the factory owner to raise their wage rate so that their real income remains unaffected. This will further increase the price of the goods and services; which in turn push up the price level to another height. Thus, the inflationary process continues and at each time, the increase in money wage and costs (i.e., cost push) will move the price level up. Interestingly, in such movements of the price level, the pressure of excess demand is absent all the while.

Economists point out that such type of inflation will affect employment adversely. The higher wage rate and subsequent rise in the price level will ultimately reduce the level of output and employment in each stage of the cycle. This has been explained with the help of figure 10.3

Figure 10.3: Cost-push Inflation



From the above figure, it can be seen that the initial level of aggregate supply and demand are represented by the curves S_0S and D_0 respectively. The output and employment level at this stage is $0Y_0$; and the price level is $0P_0$. Now, as wage increases (which are basically for the pressure of the trade union and not because of any increase in labour productivity) from S_0 to S_1, the new supply curve becomes S_1S. Given the aggregate demand, this increase in wage rate will push-up the price level to $0P_1$. This increase in the price level in turn reduces the level of employment from $0Y_0$ to $0Y_1$. Again, increased price will also have unfavourable effect on the real income of the wage earners. Thus, the trade union will further put pressure on their employees to increase their wage rate further (such that their real income remains unchanged). Thus, as the wage rate is increased further, the supply curve will further shift from S_1S to S_2S. This will push the price level up from $0P_1$ to $0P_2$. As a result, with the level of aggregate demand remaining the same, the level of output and employment will further decline from $0Y_1$ to $0Y_2$. Such movements in the price level cause cost-push inflation in the economy.

This cycle is, however, likely to discontinue for an infinite period (or in the long-run). This is because reduction in employment (or increase in unemployment) will affect the

workers and their families as well. The children of the workers will remain unemployed. This may restrain the trade union itself from pressurizing the owner to increase their wage rate further.

***Profit – Push Inflation**:* The explanation of profit push inflation is offered only with respect to such prices as are administratively fixed and not market determined.In fixing administered prices, business men are assumed to apply a markup factor to their labour and material cost per unit of output to earn a target rate of return.Such price fixing is common with oligopolistic firms or firms enjoying some market power in their respective industries.When such administered prices are pushed up due to hiked markup, it is called profit push inflation.Once started by a few powerful firms and inducing other firms to markup their profit margins,their material costs may go up.The speed of such increases have been called profit-profit spiral.

***Material Cost – Push Inflation**:* The prices of some key materials such as crude oil, steel, basic chemicals etc. may get pushed up either due to domestic autonomous push factors or due to autonomous international development. Such materials are used directly or indirectly almost in the entire economy. Therefore,increase in their prices affect significantly the cost structure in almost all industries.Consequently,whether prices are competitively determined or determined administratively, all prices are revised upward.Periodic increases in the prices of basic materials then give continual boost to the general price level through the usual spread mechanism, which is known as material cost push inflation.The Indian economy has suffered from such material cost push inflation from time to time, as for example, we can talk about the experience from the first quarter of 2007 to the 3rd quarter of the calender year of 2008.



LET US KNOW

On the basis of the rate of increase in the price level, inflation may be categorized as the following types:

Creeping or Persistent Inflation: This type of inflation is the mildest. A rate of inflation (i.e. rise in prices) up to 10 percent per decade or 1 percent per annum is called creeping or persistent inflation. This type of inflation is not viewed as dangerous for the economy.

Walking Inflation: This type of inflation is comparatively more serious than creeping inflation. Thus, increase in the price level to the tune of 30-40 percent per decade or 3-4 percent per annum is called walking inflation. This type of inflation is viewed as warning signal to the economy.

Running Inflation: This type of inflation is even more serious than walking inflation. In this case, the rise in the price level may touch 100 percent per decade or 10 per cent per annum.

Galloping or Hyper Inflation: This is the most serious type of inflation. For example, it was experienced in Germany after World War I and in Hungary and China after World War II. In this situation, prices rise to a very great extent at high speed and high prices have to be paid even for cheap things. And money becomes quite worthless and new currency has to be introduced. This situation is known as galloping inflation or hyper-inflation. The rate of rise in the price level may touch beyond 100 percent per decade or more than 10 per cent per annum.



CHECK YOUR PROGRESS

Q1: State whether the following statements are True (T) or False (F)

(i) Cost-push inflation is also known as *"too much money chasing too few goods"*. (T/F)

(ii) Crowther described inflation as *"a steady and sustained rise in prices"*. (T / F)

Q2: What do you mean by demand-pull inflation? (Answer in about 40 words).

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Q3: What do you mean by creeping inflation? (Answer in about 40 words).

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10.4 EFFECTS OF INFLATION AND ANTI-INFLATIONARY MEASURES

In this section we shall discuss the effects of inflation and anti-inflationary measures.

10.4.1 Effects of Inflation

Inflation is not considered bad so far as it creates additional employment for the factors of production of the economy. The evil effects of inflation start when it fails to do so. The major effects of inflation include the following:

- **Effects on Production:** So far as there are unemployed resources in the economy, a creeping inflation may induce business to invest more. But once creeping inflation goes out of control, then it affects production adversely. It hampers the proper functioning of the price mechanism, capital formation in the economy. Harmful and unlawful practices like hoarding, speculative trading, etc., on the other hand, go up.

- **Effects on Distribution:** Inflation also adversely affects redistribution of income and wealth. Due to inflation, the

value of money falls. This affects the poorer section of the society more than the richer section. Rising prices may help businessmen, hoarders, speculators and black marketers to earn huge profits. But, it adversely affects the fixed income earners (salaried people) and the poor section of the people. Thus, inflation may result in redistribution of income in favour of the richer section of the society and thus causes serious problem in social equity and justice.

- **Debtors and Creditors:** During inflation, creditors (who lend money) tend to lose while the debtors (who borrow money) tend to gain. This is because inflation causes decline in the value of money. When the creditor lends money, he charges a fixed rate of interest. But as the value of money falls, he tends to lose. For example, let us suppose Mr. X lends Mr. Y a sum of Rs. 1000/- on 1st of January, 2008. He charges 8 percent per annum interest on it. Mr. Y repays the money with interest on June 30, 2009. Thus, Mr. Y pays him a total amount of Rs.1120/- (Rs. 1000/- + interest Rs.120/-) on June 30, 2009. But at the same time, the price level rises by 10 percent per annum. This means that to purchase a product Mr. X had to pay Rs. 1000/- in January 2008. But for the same good, he will now have to pay Rs. 1150/- in June 2009. Thus, he loses in terms of ***purchasing power*** of money. But contrarily Mr. Y gains. Because, he repays back less purchasing power to Mr X.



Purchasing Power: Quantity of goods which can be bought by an amount of money.

- **Farmers:** Farmers tend to gain during inflation. This is because his receipts (i.e., prices of food grains) go up. But his payments on the other hand, remain either constant or do not increase much. When the farmer has to pay interest on his loan previously opted during the cultivation period, he stands to gain (as we saw in case of Mr. Y). Similarly, if he has to pay taxes on his income, he ultimately pays less (as the rate of tax is already fixed at the beginning of a financial year).

- **Entrepreneurs:** Entrepreneurs just like as the farmers gain from inflation. They get higher prices for their products. This increases the profitability of the entrepreneurs and induces

them to invest more. Again, as they often undertake loans for running/expansion of the business activities, they tend to gain from that side as well.

- **Wage Earners:** Wage earners are hit adversely. As the rate of inflation rises the cost of living also rises; but contrary to this the wage rate is not raised proportionately. Again, inflation causes rise in the prices of different commodities at different rates. Prices of some commodities may increase more while the prices of some commodities may increase slightly. Even when the wage rate is increased to the ***Cost of Living Index***, this is unlikely to relieve the wage earners to the fullest. This is because the price of a very essential commodity not included in the ***Cost of Living Index*** may rise very high and thus, may adversely affect the real income of the wage earners. The real value of past savings also declines during inflation. This also adversely affects the wage earners. Fixed income groups such as salaried and pensioners, are the worst sufferers during inflation.Persons who live on pensions, interest and rent suffer during the period of rising prices because their incomes remain constant.



Cost of Living Index: A tool to measure the cost of living. This is shown as a percentage increase on the figure for the previous year. This is similar to consumer price index; the only difference is that it also includes some other items such as interest on mortgages.

10.4.2 Anti-Inflationary Measures

Since inflation has many evils, every government tries to check it. Inflation can be checked by some or all of the following measures:

- ***Fiscal Measures*:** Following fiscal measures may be adopted for the control of inflation:
  - **Cutting Down Unnecessary Spending:** During inflation the government should attempt to cut down unnecessary developmental spending. This will help in curbing the additional flow of money to the economy.
  - **Raising Tax Rates:** Raising of tax rates especially on luxurious commodities, the corporate tax rates etc can help in checking inflation. At the same



Fiscal measures: Fiscal measures are adopted by the government.

time, promotion of saving through the provision of higher interest rates on savings can also help in controlling inflationary pressure on the economy as people will save more and spend less. Keynes in this regard prescribed for compulsory saving (he called it *'deferred payment')* to increase saving and curb the money supply in the economy.

- **Surplus Budget:** Government should present surplus budget (means collection of more revenue than expenditure) during inflation to present a surplus budget is an important fiscal instrument.

- **Public Debt:** Postponement of repayment of public debt is another instrument of controlling inflation. When the government postpones payment of public debt, it reduces the volume of liquidity available in the economy.



Monetary measures: Monetary measures are adopted by the central bank of a country.

- ***Monetary Measures*:** The following monetary measures may be adopted for the control of inflation:

  - **Credit Control:** For reducing the availability of liquidity in the economy, the central bank of the country may undertake various credit control measures. These include raising the *bank rate* and *reserve ratio*, sale of *government securities* in the open market among others.

  - **Issue of New Currency:** This is an extreme measure of monetary control. Under this system, one new currency note is exchanged for a number of old currency notes. The value of bank deposits is also changed accordingly. Such measure is adopted during hyperinflation.



Please refer to units 7 & 12. of this course for the concepts bank rate, reserve ratio and government securities.

- **Other Measures:** Other important measures for the control of inflation include:

  - **Increase in Production and Productivity:** Increase

in production of essential commodities as well as increasing the productivity of the production system producing such categories of products is one important tool of controlling inflation. Increasing the production of essential commodities will check the price rise of the important commodities. Again, raising the productivity will also help in reducing the cost of production.

- **Price Control:** Price control (means fixing an upper limit of the sale price) of essential commodities is another important tool to control inflation in the economy. This helps in easing out the inflationary pressure of the economy and in maintaining the living standard of the people.

- **Wage Freeze Policy:** Sometimes a 'wage freeze' is recommended to check inflation. That is, trade unions are requested not to ask for an increase in wages during a given period.

The success of the above measures in tackling inflation depends upon the efficiency of the government in implementing the measures.

10.5 STRUCTURAL INFLATION

The inflationary situation associated with developing countries is known as structural inflation, because it is associated with the very structure of such countries. In the early 1950's different economists like Myrdal, Streeten and several Latin American economists contributed to the concept of structural inflation.Inflation in developed countries is related with full employment policies and the labour market respond to these policies.But inflation in developing countries is associated with the developmental efforts made by such countries in order to achieve higher order of development and the structural rigidities and bottlenecks suffered by such countries. Also the socio-economic structure of developing countries is quite different from that of developed countries, which also determines the source and character of inflation in such countries.

The important causes of structural rigidities are as follows-

- **Resource Gap:** Developing countries cannot raise enough resources from taxes, borrowing, and profits of state enterprises to meet the rapidly growing public expenditure. Therefore, they depend on deficit financing. This results in excess supply of money year after year which fuels inflation.

- **Food Bottlenecks:** Due to various structural factors such as defective land ownership and tenancy, technological backwardness and low agricultural investment; the domestic supply of food does not keep pace with increase in demand for food due to increase in population and urbanization. The extreme dependence of agriculture on weather produces acute shortage of food from time to time due to drought, wide spread floods etc. In years of food shortage , prices of food grains rise very fast, boosted by further speculative hoarding of food grains by traders. Food grains, being the key wage good, with increase in their prices tend to raise other prices as well.

- **Foreign Exchange Gap:** The industrial development of developing countries requires heavy import bill. But due to low exportable surplus and relatively poor competitive power, the export earnings of these countries do not increase very fast. Most of the occasions developing countries face serious shortage of foreign exchange. So, the domestic availability of goods is short and supply cannot be easily improved through imports. As a result of that the prices of such goods increase and the increase spread to other goods as well.

- **Infrastructural Bottlenecks:** Due to resource and foreign exchange gaps, inefficiency and corruption, faulty planning and implementation, most of the developing countries suffer from serious infrastructural bottleneck in the fields of power and transport. This holds back the development in other sectors creating underutilized capacity in the economy which in turn discourages further investment. In that process, the rate of development of the entire economy gets arrested. Therefore, even small increase in expenditure gets converted into excess demand process and generates inflation.

- **Other Structural Factors:** It is also said that entrepreneurs in developing countries do not possess adequate spirit of enterprise, adventure and innovation and they prefer safe and conventional investment. At the same time, socially unproductive, private investment in land, precious metals etc. take away a sizeable part of investable resources. This behavioural pattern holds back growth and prepares the ground for inflationary forces to operate successfully.

According to the structural approach of inflation, the above factors and similar other structural features of a developing country best explain inflation in that country.



CHECK YOUR PROGRESS

Q4: State whether True (T) or False (F)

(i) Inflation affects the farmers adversely. (T/F)

(ii) Wage earners stand to gain during inflation. (T/F)

(iii) Presenting a surplus budget is an important monetary policy to curb inflation. (T/F)

Q5: How are the wage earners affected during inflation? (Answer in about 50 words)

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Q6: Why and how does a debtor stand to lose during an inflation? (Answer in about 40 words)

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10.6 LET US SUM UP

- Inflation is generally described as the situation when the price level keeps on rising. It is also described as a situation where too much money chases too few goods, resulting in an abnormal increase of price level.
- Based on four types of inflation, four theories of inflation exist, viz., Demand-pull inflation, Cost-push inflation, Mixed demand inflation and Sectoral-demand shift theory of inflation.
- Demand – Pull Inflation is loosely described as *"too much money chasing too few goods"*. It refers to the situation where the general price level rises because the demand for goods and services exceeds the supply available at the existing prices.
- There exists three major approaches to the demand pull theory of inflation; viz., Keynes' inflationary gap analysis, the excess demand analysis and Bent Hansen's demand inflation theory.
- Excess Demand Analysis views inflation as the process of rising prices initiated and sustained by excess of demand for goods and services over the level of their supply.
- According to the cost – push inflation approach, inflation is induced by rising costs. The underlying idea of this approach is that inflation may arise even in the absence of excess demand for goods and services.
- The factors that may push cost of production are basically three viz., wage-push inflation, profit-push inflation and material cost-push inflation.
- On the basis of the rate of increase in the price level, inflation may be categorized in to the following types:
  - Creeping or Persistent inflation
  - Walking inflation
  - Running Inflation
  - Galloping or Hyper Inflation

- Inflation adversely affects the production activities in an economy. It hampers the proper functioning of the price mechanism and capital formation in the economy.
- Inflation also adversely affects redistribution of income and wealth.
- During inflation creditors (who lend money) tend to lose while the debtors (who borrow money) tend to gain.
- Important anti-inflationary monetary measures include:
  - Credit control and
  - Issue of new currency.
  - Increase in production and productivity
  - Price control and
  - Wage freeze policy
- The inflationary situation associated with developing countries is known as structural inflation, because it is associated with the very structure of such countries.



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10.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: (i) False (ii) False

Ans to Q No 2: Demand – Pull Inflation is loosely described as *"too much money chasing too few goods"*. It refers to the situation where general price level rises because the demand for goods and services exceeds the supply available at the existing prices.

Ans to Q No 3: Creeping or Persistent inflation is considered the most mild in terms of the rate of increase in the price level. A rate of inflation (i.e. rise in prices) up to 10 percent per decade or 1 percent per annum is called creeping or persistent inflation.

Ans to Q No 4: (i) False (ii) False (iii) True

Ans to Q No 5: Wage earners are adversely affected during inflation. Compared to the rate of inflation, the wage rate is not raised proportionately. Even when wage rate is increased to the cost of living index, this is unlikely to relieve the wage earners to the fullest. The real value of past savings also declines during inflation.

Ans to Q No 6: During inflation debtors stand to gain. This is because by the time debtors pay back the loan amount, the value of money declines. The rate of interest remaining the same, the debtors transfer less purchasing power to the creditors. Thus, the debtors gain during inflation.



10.9 MODEL QUESTIONS

Short Questions (Answer each question in about 150 words)

Q 1: Write a short note on inflation.

Q 2: Explain the various causes of inflation.

Q 3: Describe anti-inflationary measures other than fiscal measures.

Q 4: Explain the difference between the demand pull and cost-push approach of inflation.

Essay-type Questions (Answer each question in about 300-500 words)

Q 1: Discuss the inflation in the framework of demand pull inflation. Suggest some anti-inflationary measures.

Q 2: Describe the cost-push approach to inflation. How does inflation affect the economy?

Q 3: Explain the concept of structural inflation.

Q 4: Write an essay on anti-inflationary measures.

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UNIT 11: DEFLATION AND STAGFLATION

UNIT STRUCTURE

11.1 Learning Objectives

11.2 Introduction

11.3 Deflation

- 11.3.1 Meaning and Definition of Deflation
- 11.3.2 Causes of Deflation
- 11.3.3 Effects of Deflation
- 11.3.4 Anti-Deflationary Measures
- 11.3.5 Inflation vs. Deflation

11.4 Stagflation: Meaning and Concept

11.5 Let Us Sum Up

11.6 Further Reading

11.7 Answers to Check Your Progress

11.8 Model Questions

11.1 LEARNING OBJECTIVES

After going through this unit, you will be able to :

- put forward the meaning of deflation
- discuss the different types of causes and effects of deflation
- explain different anti-deflationary measures
- make a comparative analysis between inflation and deflation
- discuss the meaning and concept of stagflation.

11.2 INTRODUCTION

In the previous unit, we have discussed about inflation. In this unit, we shall discuss other two related phenomena, viz., deflation and stagflation.

Deflation is termed as opposite to inflation. It is characterized by the fall in general price level. However, only the situation of falling prices is not called deflation. In this unit, we shall discuss its definition, types, causes and effects. Apart from that, the unit will enable you to state the anti-deflationary measures and finally, to make a comparative analysis between inflation and deflation.

Stagflation is defined as the situation in an economy in which period recession and rising unemployment is coupled with positive rates of price inflation. In this unit, we shall discuss briefly the meaning and concept of stagflation.

11.3 DEFLATION

In this section we shall discuss the concept of deflation in details.

11.3.1 Meaning and Definition of Deflation

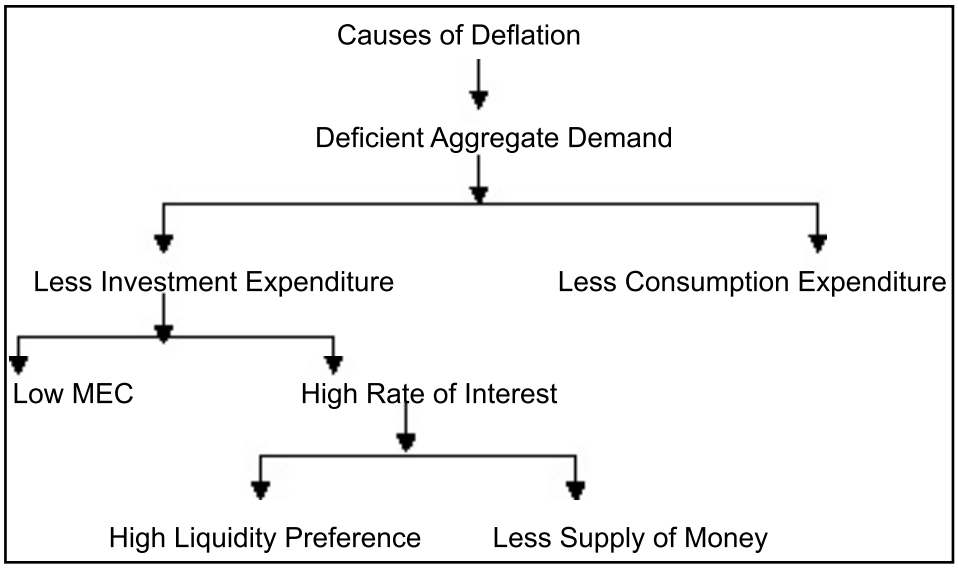
Both inflation and deflation refer to the movement of prices. Deflation is the opposite of inflation. In loose terms, it may be described as the phenomenon of falling prices. During deflation, since prices fall faster than costs, there will be heavy losses for producers and businessmen. There will not be profits in any branch of economic activity. So there will be a fall in investment. This results in unemployment. Crowther defines deflation as a '*state in which the value of money is rising, i.e., prices are falling*'.

11.3.2 Causes of Deflation

The following are the important causes of deflation:

- **Keynes' Explanation:** Keynes developed a theoretical model explaining the various causes of deflation. The key elements in this model can be shown with the help of the following tree diagram 11.1:

Figure 11.1: Causes of Deflation according to Keynes



Let us elaborate these elements in brief.

- ***Deficient Aggregate Demand:*** The root cause of deflation according to Keynes is the lack of aggregate demand. Lack of aggregate demand results in over-production and unemployment.

- ***Less Investment Expenditure:*** Investment expenditure is adversely affected basically for two reasons viz., low MEC (or low profitability of capital) and high rate of interest.

- ***Less Consumption Expenditure:*** People in general spend proportionately less in consumption as their income increases. This has been termed as psychological law of consumption. This phenomenon adversely affects the profitability (i.e., MEC) of fresh investments.

- ***High Rate of Interest:*** When MEC(*Marginal Efficiency of Capital)* falls, people tend to keep money in cash instead of investing money in securities. This raises the rate of interest which further reduces investment.

Thus, according to Keynes, rising rate of interest, declining MEC and falling consumption expenditure lead to

deficient aggregate demand that ultimately leads to deflationary tendencies in the economy.

- **Reduction in Government Expenditure:** If the government decides to reduce the level of public expenditure, it adversely affects the national income and the aggregate demand level of the economy. This also results in the reduction in employment. All these lead to lower investment activities in the economy and the economy moves towards deflationary conditions.

- **Heavy Taxes:** When government imposes heavy tax rates, it reduces the disposable income with the people. This leads to the reduction in both consumption expenditure and investment expenditure which ultimately results in deflationary situation in the economy.

- **Public Borrowing:** When government borrows from the public, it reduces the liquidity available with the public. This reduces aggregate demand and the economy is pushed towards deflationary situation.



CHECK YOUR PROGRESS

Q1: State whether True (T) or False (F)

(i) Deflation is a phenomenon of falling prices. (T/F)

(ii) Imposition of heavy taxes is helpful during deflation.(T/F)

Q2: How does the reduction in the government expenditure lead to deflation? (Answer in about 40 words).

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11.3.3 Effects of Deflation

The major effects of deflation include the following:

- **Effects on Production:** Deflation adversely affects the production activities. During deflation the prices of finished goods tend to fall; but the costs of producing those goods do not fall. Again, the aggregate demand for goods and services also falls at the same rate or fall with a lag. Thus, production is adversely affected due to deflation.

- **Traders:** Just as the producing class, traders are also adversely affected during deflation. This is because they have to buy goods at prices which tend to fall as time passes. Thus, they have to buy goods at higher prices; but they have to sell those at lower prices.

- **Consumers:** Due to the phenomenon of falling prices, consumers tend to gain. As prices of goods and services fall, value of money rises.

- **Wage earners:** Wage earners gain during inflation. As prices of goods and services tend to fall, the value of money rises. Again, as wage rate cannot be reduced (as trade union will oppose it) easily, the falling prices help wage earners to better their life styles.

- **Effects on the economy:** Deflation slows the process of economic growth; it adversely affects the investment climate of the economy, employment generation and increases poverty. Creditors tend to gain and debtors tend to lose as the value of money goes on increasing during deflation. This would lead to default of loan repayment, NPA_S and finally breaking down of banking and financial system.If sustained for a long time, deflation may lead to depression and ruin the whole economy.

11.3.4 Anti-Deflationary Measures

Since deflation may ruin the economy, every government must try to control it. Deflation may lead to depression. Deflation can be checked by some or all of the following measures:

- **Reduction in Tax Rates:** Reduction in tax rates will help motivate entrepreneurs to invest in new projects.
- **Redistribution of Income:** Redistribution of income from richer section of the society to the poorer section will help in raising the income level of the poor. Again, as the marginal propensity to consume is higher for the poor, this will ultimately enhance the aggregate demand level in the economy.
- **Repayment of Public Debt:** Repayment of public debt will increase the purchasing power of the people. This will help in raising the aggregate demand level in the economy.
- **Subsidies:** Provision of government subsidies will help to raise the investment activities in the economy.
- **Public Investment:** Public investment is an important tool to control deflation. Public investment should aim at supplementing private investment in the economy. Public investments in building up infrastructural facilities are highly recommended during deflation.
- **Deficit Financing:** Deficit financing and setting up of infrastructural facilities thereby can help increasing private investment in the economy. Again, public investment in development activities will help to raise the standard of living of the people and thereby boost the level of aggregate demand.
- **Other Measures:** Other important measures to control deflation include reduction in rate of interest, credit expansion measures, export promotion & import restriction measures and regulation of production in the economy. Reduction in rate of interest can help in boosting investment

in the economy. Credit expansion measures will help investors in the same line. Export promotion & import restriction measures will stimulate domestic production. And the regulation of production will help in eliminating excess production in the economy.

11.3.5 Inflation vs. Deflation

Both inflation and deflation are evils. Both inflation and deflation adversely affect the economy and hence the society. A comparative analysis of the two, however, shows that deflation is more undesirable than inflation. Following points are important in this regard:

- Inflation adversely affects the redistribution of income in favour of the richer section of the society, but deflation reduces the national income.
- Although it is not universally accepted, but in most of the cases,inflation occurs after the attainment of full employment, while deflation occurs in under-employment situations.
- Inflation is easier to control than deflation.
- Mild inflation is better as it promotes economic growth; but deflation always adversely affects the economy.
- Though deflation may redistribute income in favour of the poor, yet it reduces output and employment at the same time. This generates poverty in the society. Thus, it ultimately adversely affects the poor section of the people. This means that deflation adversely affects both the rich and the poor sections of the society, while inflation adversely affects the poor sections. Again, deflation may lead to depression and complete ruin of the economy.

11.4 STAGFLATION: MEANING AND CONCEPT

The term ‘stagflation’ has been coined by joining together ‘stag’ of stagnation and ‘flation’ and of ‘inflation’. The term was coined to describe

a phenomenon the world witnessed during the early 1970s, in which two paradoxical situations: inflation, on one hand and declining output, employment and under-utilisation of productive capacity on the other, were found to co-exist. Thus, the term stagflation is defined as the situation in an economy in which periods of recession and rising unemployment is coupled with positive rates of price inflation.

The phenomenon of stagflation was first witnessed in the western countries in the 1970s. As an economic phenomenon, stagflation emerges when sudden shock increases the costs of supply. The stagflation of the early 1970s was caused by the sudden increase in the oil prices enforced by the ***OPEC*** countries. In 1973, the OPEC countries increased the oil prices by four times. Such sharp rise in oil prices adversely affected the oil importing countries. For example, due to such steep rise in oil prices, the prices of manufactured goods in USA increased sharply, as a consequence, the rate of inflation in the US economy in 1974 increased upto 12 percent. The result was a decline of the ***real GNP*** growth rate, which further led to high rate of unemployment in the economy, which shot upto nearly 9 percent. This was however, not seen only in the USA, but also in the developed economies like UK, Germany and France, etc.



OPEC: Oil and Petrolium Exporting Countries.

These countries started to recover from such recession in 1975 and it took a few years to recover. However, a revolution broke out in Iran in 1979 again that led to a crisis in the world oil market. This time, OPEC doubled its oil prices. This brought back stagflation in the developed countries.

The phenomenon of stagflation, i.e., the combination of high rate of inflation coupled with high rate of unemployment, is not easily comprehensible from the theoretical perspectives of Economics. In fact, this phenomenon puzzled many who believed in the theoretical framework of the monetarists or the Keynesian economics; as both were unable to explain this phenomenon adequately. This led to the emergence of a new economic thought called as the 'supply side economics'. You would be able to know more about these concepts later on.



CHECK YOUR PROGRESS

Q 3: State whether the following statements are True (T) or False(F)

(i) Deflation promotes production activities in the economy. (T/F)

(ii) Raising the rate of interest is another tool to control deflation in the economy. (T/F)

Q4: How does redistribution of income help controlling deflationary pressure in the economy? (Answer in about 40 words).

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Q5: Would you like to prescribe for deficit financing during deflation? (Yes/No). Justify your answer.(Answer in about 40 words).

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11.5 LET US SUM UP

- Deflation is the opposite of inflation. It may be described as the phenomenon of the falling of general price level.
- The root cause of deflation, according to Keynes, is the lack of aggregate demand.
- Deflation slows the process of economic growth; it adversely affects the investment climate of the economy, employment generation and increases poverty.
- Both inflation and deflation adversely affect the economy. However, it can be said that deflation causes more adverse affects on the economy.
- Deflation can be checked by reducing the tax rates, redistributing the income from the richer section of the society to the poorer

section, enhancing the public investment and following the deficit financing.

- Stagflation refers to the combination of high rate of inflation coupled with high rate of unemployment.

- The phenomenon of stagflation puzzled many who believed in the theoretical framework of the monetarists or the Keynesian economics; as both were unable to explain this phenomenon adequately. This led to the emergence of a new economic thought called as the supply side economics.



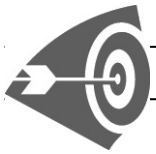
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11.7 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: (i) True (ii) False

Ans to Q No 2: When the government reduces the level of public investment, this adversely affects the national income and the aggregate demand level of the economy. This reduces employment. All these lead to lower investment activities in the economy and the economy moves towards deflationary conditions.

Ans to Q No 3: (i) False (ii) False

Ans to Q No 4: Redistribution of income from the richer section of the society to the poorer section will help in raising the income

level of the poor. Again, as the marginal propensity to consume is higher for the poor, this will ultimately enhance the aggregate demand level in the economy.

Ans to Q No 5: Yes. This is because deficit financing and setting up of infrastructural facilities can help increasing private investment in the economy. Again, public investment in development activities will help raising the standard of living of the people and thereby boost the level of aggregate demand.



11.8 MODEL QUESTIONS

Short Questions (Answer each question in about 150 words)

Q 1: Write a short note on deflation.

Q 2: Explain the causes of deflation in an economy.

Q 3: Explain the concept of stagflation.

Q 4: Explain how deflation effects the wage earners.

Essay-type Questions (Answer each question in about 300-500 words)

Q 1: Describe some of the anti-deflationary measures taken by the government.

Q 2: Explain the Keynes' view about the causes of deflation.

Q 3: Discuss the effects of deflation in an economy.

Q 4: Make a comparative analysis between inflation and deflation.

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UNIT 12: MONETARY POLICY

UNIT STRUCTURE

12.1 Learning Objectives

12.2 Introduction

12.3 Objectives or Goals of Monetary Policy

12.4 Targets of Monetary Policy

12.5 Instruments of Monetary Policy

12.6 Effects of Monetary Policy in Inflation and Recession

12.7 Let Us Sum Up

12.8 Further Reading

12.9 Answers to Check Your Progress

12.10 Model Questions

12.1 LEARNING OBJECTIVES

After studying this unit, you will be able to

- learn the concept of monetary policy adopted by Central bank
- understand the various goals of monetary policy
- explain the targets of monetary policy
- illustrate the various instruments of monetary policy through which the monetary policy aims to achieve its goals
- know the effects of monetary policy at times of inflation and deflation.

12.2 INTRODUCTION

Monetary policy refers to the policy measures undertaken by the Central Bank of a country for influencing the volume of money, the level of rate of interest and the use of money and credit. It basically involves with the deliberate manipulation of various monetary instruments like bank rate, open market operations, variable reserve requirements and qualitative credit controls etc. so as to realize the basic objectives of

economic policy. A.J. Shapiro defines monetary policy as "the exercise of central bank's control over the money supply as an instrument for achieving the objectives of monetary policy". According to H. G. Johnson, Monetary Policy is a "policy employing the central bank's control of the supply of money as an instrument for receiving the objectives of general economic policy". Thus monetary policy involves with the management of money supply for the implementation of general economic policy of the government for achieving pre-determined objectives.

In this unit, we shall discuss briefly about the goals, targets, instruments and effects of monetary policy. After going through this unit you will learn the importance of monetary policy in an economy.

12.3 OBJECTIVES OR GOALS OF MONETARY POLICY

The monetary policy has many basic objectives. But all the objectives may not always be consistent to the changing circumstances and requirements of an economy. Again, some objectives clash with one another. The various objectives of monetary policy can be stated as follows:

- **Price Stability**: One of the important objectives of monetary policy is to stabilize the general price level. Price stability does not indicate that each and every price should be kept fixed; rather it means that the general price level or the average prices should not be allowed to fluctuate beyond certain maximum limit. A policy of price stability helps in keeping the value of money stable, eliminates cyclical fluctuations, helps in maintaining economic stability, helps in reducing the gap between the rich and the poor, secures justice and promotes economic welfare. In short, price stability ensures smooth functioning of the economy and creates conditions for stable economic growth.

Many criticisms have been raised against price stability as an objective of monetary policy. It has been argued that the concept of price stability is not clear because the level at which price to be stabilised and what price to be stabilised are open to doubts. Again it is viewed that in a dynamic economy, price variation is necessary for successful price mechanism which can lead to proper allocation of resources, rise in productive activities and economic growth. Some other views also state that price stability is not

a feasible objective of monetary policy because the Central bank cannot effectively control the volume of credit in an economy due to existence of a large number of non-bank financial intermediaries whose activities are beyond the control of Central bank.

- **Exchange Stability**: Another important objective of monetary policy is exchange stability. Under the gold standard, exchange rate stability was considered as the traditional objective of monetary policy. Exchange rate stability is very essential for the promotion of smooth international trade. Frequent changes in exchange rates can make value of currency of a country unstable, encourage speculation in the exchange markets, fluctuations in the internal price level and create adverse effect on economic and political relationship among countries. The monetary policy of a country ensuring balance of payment equilibrium can maintain stability in the exchange rates.

But critics pointed out that under the condition of stable exchange rates, the inflationary and deflationary conditions of some countries are passed on to other countries and this is very harmful. In modern times, as IMF proceeded to deal with the problem of maintaining exchange rate stability, this objective of monetary policy of a country has lost much of its force.

- **Neutrality of Money**: Neutrality of money is another basic objective of monetary policy. Many economists like Robertson, Wicksteed, and Hayek etc. viewed that neutrality of money is the main objective of monetary policy. Neutrality of money suggests that any changes in the supply of money should not affect the total volume of output and total volume of transactions of goods and services in the economy. This objective of monetary policy indicates that money supply should be controlled in such a way that money should be neutral in affecting the various activities of an economy.

The supporters of neutral money believe that changes in the supply of money are the root cause of all sorts of economic fluctuations and disturbances. The neutral money policy believes that if money is kept as neutral and supply of the same is consistent with the requirement of the economy, there will be no disturbances and no fluctuations in the economy.

But the critics viewed that money is not neutral in practice. It plays a very active and dynamic role in the process of economic transformation of

an economy. Moreover, the concept of neutral money is vague. On the one hand it is based on the policy of laissez faire and on the other it requires the monetary authority to intervene to keep money neutral.

- **Full Employment**: Full employment of human and all other natural resources is another important objective of monetary policy. J.M.Keynes advocated the role of monetary policy in promoting full employment of natural as well as human resources of an economy. He viewed that cheap money policy is very helpful for achieving the goal of full employment of human and other natural resources of an economy.

The term full employment does not mean complete absence of unemployment; some amount of seasonal and frictional unemployment is compatible with the concept of full employment. To realize the objective of full employment monetary policy is to be designed in such a way that money supply be expanded along with the reduced rate of interest which can raise the investment demand and equates it with full employment savings. The monetary policy which tries to raise the level of investment and finally to achieve the goal of full employment by reducing the cost of borrowing, is commonly termed as cheap money policy. In fact, the policy of full employment is very conducive for achieving the target of maximum economic welfare as it tries to solve the problem of unemployment and underemployment of economic resources. It also reduces the possibility of inflationary and deflationary situations by maintaining saving investment equality in the economy.

- **Economic Growth**: Now a day's economic growth is regarded as the main objective of monetary policy especially for the underdeveloped countries. The term economic growth refers to the increase in the real national income of a country over a long period of time. In most of the countries of the world and more specifically in the less developed countries, there is presence of large volume of unutilised and underutilised physical and human resources. The basic reason behind such unused resources is the deficiency of required finances. In such circumstances the expansionary monetary policy can play a very significant role by providing necessary monetary resources for proper use of unutilised resources. In this way, an expansionary monetary policy can help in enhancing and accelerating process of economic growth.

For proper functioning of monetary policy as an agent of economic growth two basic conditions must be fulfilled:

- The monetary policy should be flexible in nature so that equilibrium between aggregate demand for money and aggregate supply of goods and services can be maintained.
- The monetary policy should be conducive for promoting saving and investment in the economy.

• ***Balance of Payments Equilibrium***: Another objective of monetary policy is to achieve balance of payment equilibrium. A properly designed monetary policy can play a very important role in bringing balance of payments equilibrium without having any disturbances in the stable exchange rate. If a country runs with a deficit in balance of payments, it can adopt restrictive monetary policy. Restrictive monetary policy reduces currency and credit which again brings down the price level within the country. The trend of falling price will encourage exports and accordingly discourage imports. Increase in exports and decrease in imports is very helpful for correcting the disequilibrium in the balance of payments position of the country.

Some critics argued that monetary policy can influence the import function and foreigners demand for export to a very limited extent. Because, monetary variables directed for this purpose can be none better than the expedients designed for creating small improvements in balance of visible trade for a temporary period.



CHECK YOUR PROGRESS

Q1. What do you mean by monetary policy? (Answer in about 40 words)

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Q2.What are the main objectives of monetary policy? (Answer in about 30 words)

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Q3. Explain economic growth as an objective of monetary policy. (Answer in about 50 words)

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12.4 TARGETS OF MONETARY POLICY

For realising the various objectives of monetary policy, the monetary authority has to determine some specific targets. Presence of uncertainty does not allow the central bank to correctly predict the impact of its current policy on the objectives to be realised. Moreover the effect of monetary policy and its instruments on its objectives is not so quick and direct. Again there are other policy and non-policy factors which affect the goal variable of monetary policy for which the true effects of the monetary policy may not be easily separated and identified. Effectiveness of monetary policy depends to a large extent on its impact on spending activities and aggregate demand. This is very complex to analyse and many times the effects of policy decisions on spending become doubtful and unpredictable. Due to such issues, the policy makers make use of some proxy variables in place of goal variables and use them as monetary policy targets. The targets of monetary policy can be classified as:

- **Intermediate Targets:** Intermediate target variables lie between the tools and the achievement of goals of monetary policy. Through the medium of intermediate targets the monetary authority try to fulfil its final goals. The intermediate targets are generally short term or medium term in nature and therefore their results can be observed in a short period of time. This enables the monetary authority to decide whether the policy formulated for achievement of final goals is correct or not.

- **Operating Targets:** Sometimes the monetary authority fails to affect the intermediate targets with the tools available with them. In such a situation, they select another category of targets which is known as operating targets. Examples of such targets are monetary base or interest rate targets.

Basically the three most important target variables of monetary policy are money supply, bank credit and rate of interest.

Conditions of a Good Target: A good target of monetary policy should satisfy some basic conditions as mentioned below:

- There should be close relationship between the target variables and the ultimate goal variables of monetary policy and this relationship should be easily understandable and reliably estimable.
- The target variables should be easily attainable.The target variables should be rapidly affected by policy variables, the impact of non-policy variables on them should be negligible.
- There should be accurate and reliable data available so that the target variable is easily measurable and there is no time lag in the process of measurement.
- The three target variables, namely, money supply, bank credit and rate of interest fulfil the third criterion of measurability equally well. In regard to the criteria of attainability, the target variable rate of interest does not meet this satisfactorily. Also interest rate is largely affected by non-policy factors. There are differences of opinions among economists in relation to the fulfilment of the criterion of closeness to goal variables by the target variables.As such money supply and bank credit are regarded to be superior to the rate of interest on the basis of attainability and measurability criteria. Again, between money supply and bank credit, money supply is believed to be a better monetary policy target because :
  - The impact of policy variables is higher on money supply than the other target variables
  - Empirically it has been observed that money supply has a stable relationship with the level of economic activities of an economy

- Empirical evidence is weak in support of a close causal relationship between bank credit and higher monetary policy goal variables.



CHECK YOUR PROGRESS

Q4. What is meant by targets of monetary policy? (Answer in about 30 words)

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Q5: What are the conditions of a good target of monetary policy? (Answer in about 40 words)

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Q6:What are the classifications of monetary policy targets? (Answer in about 30 words)

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12.5 INSTRUMENTS OF MONETARY POLICY

There are four basic instruments of monetary policy through which the central bank of a country tries to achieve various pre-determined objective. Bank rate, open market operations, variable reserve ratio and selective credit control are the instruments of monetary policy and the central bank of a country usually try to control the supply of money and credit with the help of these instruments.

- **Bank Rate:** The bank rate is the minimum lending rate of interest of the central bank at which it rediscounts first class bills of exchange and government securities that are held by the commercial banks.Through the instrument of bank rate, the central bank can control the cost and availability of credit to the commercial banks. When there are inflationary

pressures in an economy, the central bank raises the bank rate and as a result of which contractions of credit and prices take place in the economy. Similarly when prices are falling, the central bank reduces the bank rate which encourages borrowing and helps in expansion of income, employment, demand in the economy and the economy gets recovered from the deflationary period.

- **Open Market Operations:** Open market operations means buying and selling of securities by the central bank in the open market. It is the most popular instrument of monetary policy. During the period of inflation, the central bank sells securities and as a result, reserves as well as lending capacity of commercial banks are reduced. It helps in reducing the volume of investment and thus the rise in price is controlled. During deflation, the central bank buys securities in the open market which in turn enhances the reserves of commercial banks creating increased availability of credit, investment, income, demand and cures the deflationary pressures in the economy.

- **Variable Reserve Ratio:** Every bank has to keep a certain percentage of its total deposits with the central bank in the form of reserve funds. These reserve funds of commercial banks tend to vary depending upon the changes in price level in the economy. When prices are moving in the upward direction, the central bank raises the reserve ratio so as to reduce the lending capacity of the commercial banks. This trend reduces the volume of investment, output, employment, income and ultimately the prices of goods and services. Contrary to this, when prices fall, the reserve ratio is lowered and as a result the lending capacity of the commercial banks as well as the general level of economic activities tends to increase and prices start rising. (*We have already discussed about this in unit 7*).

- **Selective Credit Control:** The above mentioned three instruments of monetary policy are only capable of controlling the total quantity of money and credit in the economy.Selective credit controls are specific types of monetary policy instrument used by the central bank mainly to control undesirable credit and direct flow of credit to desirable sectors in the economy. The main types of selective credit control measures used are:

- ***Marginal Requirements*:** This is mainly used to control the speculative activities and hoarding during inflationary period of an economy. When credit is advanced against any securities, the difference between market value of it and its maximum loan value is known as marginal requirement. This implies that if the marginal requirement of a security is 20% and its market price is Rs 100, then the maximum loan possible against that security is Rs. 80. When in an economy prices of various goods and services start rising, the central bank raises the margin requirement specifically on the loans required for various speculative activities and thus borrowers become eligible to get fewer amounts of loans against specified securities. In this way, the level of speculative activities and the rising prices of goods and services can be checked. On the other hand, during recession, the central bank reduces margin requirement on specific loans which encourages investment, level of income and prices in the economy.

- ***Regulation of Consumer Credit*:** This instrument of selective credit control is used to regulate the purchase of consumer goods and household appliances. When loan for consumer durables is advanced, a certain percentage of the market value of the product is to be paid by the consumers in cash as down payment and the rest amount is financed by bank credit which the consumer has to repay within a certain time period. The central bank can regulate such credit for consumer durables by changing the amount of down payment or the period of repayment. This method is helpful at times of inflation to control the excessive demand of consumer durables.

- ***Credit Rationing*:** Credit rationing is used to restrict credit for specific categories of borrowers and for specific purposes in a more direct way. Through this instrument, central bank fixes limit on aggregate portfolios of commercial banks. It is also used to put limitations on the maximum amount of credit the central bank provides to each applicant bank.

- ***Moral Suasion*:** The central bank sometimes may request and persuade and use its moral influence on the member commercial banks to cooperate and help the central bank in implementing the general monetary policy successfully.

In addition to all these instruments, the central bank uses some other methods like publicity and some direct action to selectively control the credit and flow of money supply in the economy.

It is to be noted that no single instrument of monetary policy can be regarded as fully effective to achieve the basic objectives of an economy. For effective functioning of a monetary policy two or more of the instruments should be adopted simultaneously.

12.6 EFFECTS OF MONETARY POLICY IN INFLATION AND RECESSION

Traditionally attaining price stability was regarded as the main concern of monetary policy of a country. However in recent years, the emphasis of monetary policy has shifted to a great extent from price stability to economic growth. But even today monetary policy has a great role to play in controlling inflationary and deflationary pressures arising in an economy.

Effects of Monetary Policy During Inflation: A monetary policy can be used as a key instrument for controlling inflationary pressure of an economy. To control inflation the central bank implements restrictive monetary policy which reduces aggregate demand for goods and services and the level of investment in the business sector. For this purpose, the central bank starts to sell government securities in the open market, enhances reserve requirements of member banks, raises the bank rate and introduces selective credit control measures with a view to reduce the volume of consumer as well as business credit. This helps the economy to overcome from the situation of heavy inflationary pressures.

But critics point out that monetary policy is not properly effective for controlling inflation due to the existence of non-bank financial intermediaries which have major decisive role in the financial market and the supply of money in the economy. Also there are time lags in the process of implementation of restrictive monetary policy.

Effects of Monetary Policy During Recession: Recession is characterised by the falling level of economic activities including decreasing trend of consumer and investment demand. An expansionary monetary policy adopted by central bank expands the availability of credit and helps in shifting the aggregate demand in the economy in an upward direction. The expansionary monetary policy adopted by central bank may be in the form of the purchase of government bonds and securities in the open market by central bank, a reduction in the reserve requirements of the commercial banks, reduction in bank rate or encouragement of specific credits through selective credit control measures. These measures are conducive for easier availability of credit, reduction in the cost of credit and leads to overall expansion in economic activities.

It is generally believed that monetary policy is more effective in controlling inflation; its role in deflationary situation is relatively limited. The reason behind such opinion was the Great Depression of the 1930s and the publication of J.M. Keynes' book *The General Theory of Employment, Interest and Money*. When too much pessimism affect businessmen following severe depression in the economy,the central bank's policy to revive the economy through expansion of credit and stimulating investment becomes non effective. At the same time, it fails to enhance consumer demand as well because consumers suffered with widespread unemployment and reduced income do not come forward to buy consumer goods through bank loans. However the view of monetarists does not support this and they view that monetary policy is equally effective in deflationary situation just as inflation.



CHECK YOUR PROGRESS

Q7:What are the basic instruments of monetary policy?(Answer in about 30 words)

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Q8: Explain bank rate as an instrument of monetary policy. (Answer in about 40 words)

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Q 9: What is meant by selective credit control measures adopted by central bank? (Answer in about 40 words)

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12.7 LET US SUM UP

- Monetary policy involves with the management of money and credit for the implementation of general economic policy of the government for achieving pre- determined objectives. It refers to the policy measures undertaken by the central bank of a country for influencing the volume of money, the level of rate of interest and the use of money and credit.
- The basic objectives of monetary policy are attainment of price stability, exchange stability, maintaining neutrality of money, gaining full employment, economic growth and maintaining balance of payments equilibrium.
- For proper success of a monetary policy, the monetary authority makes some targets. Target variables are classified as intermediate targets and operational targets.
- The most important target variables of monetary policy are money supply, bank credit and rate of interest.
- Attainability, measurability, closeness or relatedness are some basic features of a good monetary target.
- The instruments of monetary policy are bank rate, variable reserve ratio, open market operations and selective credit control.
- The bank rate is the minimum lending rate of interest of the central bank at which it rediscounts the first class bills of exchange and government securities that are held by the commercial banks.
- Open market operations refer to the buying and selling of securities by the Central Bank in the open market.

- Cash reserve ratio refers to the percentage of deposits of the commercial banks which they have to keep as reserve funds with the central bank.
- Selective credit controls are specific type of monetary policy instrument used by the central bank mainly to control undesirable credit and direct flow of credit to desirable sectors in the economy
- During the period of recession, expansionary monetary policy attempts for an expansion of credit market and thus leads to an upward shift in aggregate demand.
- During the period of inflation, a restrictive monetary policy can reduce the aggregate demand through control in money supply and credit.



12.8 FURTHER READING

1. Paul, R.R. (2008). *Monetary Economics.* Ludhiana: Kalyani Publisher.
2. Rana, K.C and Verma, K.N. (1976). *Macroeconomics Analysis*. Jalandhar: Vishal Publishing Co.



12.9 ANSWERS TO CHECK YOUR PROGRESS

Ans. to Q No 1: Monetary Policy refers to the policy measures undertaken by the Central Bank of a country for influencing the volume of money, the level of rate of interest and the use of money and credit through its instruments like bank rate, variable reserve ratio, open market operations, selective credit control etc.

Ans. to Q No 2: The basic objectives of monetary policy are

- Attainment of price stability,
- Maintaining exchange stability,
- To keep neutrality of money,
- Economic growth and
- Achieving balance of payment equilibrium

Ans. to Q No 3: In modern times, achieving high rate of economic growth is an important objective of monetary policy especially

for the developing countries. One of the main issues of the underdeveloped countries is the shortage of fund and capital because of which huge natural and human resources remain unutilised. Monetary policy can provide necessary fund through an expansionary monetary policy so that the unutilised resources can be best utilised and accelerate the pace of economic growth.

Ans. to Q No 4: The targets of monetary policy are some short term or medium term proxy variables which are used to achieve the final goal variables of monetary policy.The three most important target variables of monetary policy are money supply, bank credit and rate of interest.

Ans. to Q No 5: A good target of monetary policy should fulfil some basic conditions. Attainability, measurability, closeness or relatedness to the goal variables are the conditions of a good monetary target**.**

Ans. to Q No 6: The targets of monetary policy can be classified as intermediate targets and operational targets.

Ans. to Q No 7: The basic instruments of monetary policy are bank rate, variable reserve ratio, open market operations and selective credit control.

Ans. to Q No 8: The bank rate is the minimum lending rate of interest of the central bank at which it rediscounts first class bills of exchange and government securities that are held by the commercial banks. Through the instrument of bank rate, the central bank can control the cost and availability of credit to the commercial banks.

Ans. to Q No 9: Selective credit controls are specific types of monetary policy instruments used by the central bank mainly to control undesirable credit and direct flow of credit to desirable sectors in the economy**.**Marginal requirements, regulation of consumer credit, credit rationing, moral suasion are the various instruments of selective credit control.



12.10 MODEL QUESTIONS

Short questions (Answer each question in about 150 words)

Q1: Briefly discuss the concept of variable reserve ratio.

Q2: Discuss the conditions of a good monetary policy target.

Q3: What is meant by open market operations?

Q4: Trace out the importance of monetary policy in an economy.

Essay- type questions (Answer each question in about 300-500 words)

Q1: Discuss the effect of monetary policy in inflation and deflation**.**

Q2: What is selective credit control? Explain the methods of selective credit control.

Q3: Discuss the objectives of monetary policy.

Q4: Explain the targets of monetary policy in an economy.

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UNIT 13: THE FINANCIAL SYSTEM

UNIT STRUCTURE

13.1 Learning Objectives

13.2 Introduction

13.3 Meaning of Financial System

13.4 Role of Financial System

13.5 Components of Financial System

13.6 Let Us Sum Up

13.7 Further Reading

13.8 Answers to Check Your Progress

13.9 Model Questions

13.1 LEARNING OBJECTIVES

After going through this unit, you will be able to :

- put forward the meaning of financial system
- understand the role of financial system
- explain the components of financial system.

13.2 INTRODUCTION

For the purpose of economic transformation the financial system is one of the most important institutional and functional tools. It provides various services which are essential in a modern economy. A sound and effective financial system is desired by every economy for its proper functioning. It is an institutional arrangement through which exchange of funds between lenders, borrowers and investor takes place. This system incorporates different markets, institutions, instruments, services and mechanisms which further leads to generation of savings, investment, capital formation and growth. Financial system operates at national, global and firm specific levels. In this unit we will learn about the meaning ,role and components of financial system in details.

13.3 MEANING OF FINANCIAL SYSTEM

The term financial system refers to a set of institutional arrangement through which financial surpluses in the economy are mobilized from surplus units and transferred to the deficit units. Surplus units are those where income / earnings are more than the expenditure. Hence they have a surplus of funds. In contrast to surplus units, deficit units spend more than their income. Hence they need to borrow funds from others. A typical surplus unit is the household sector and a typical deficit unit is the business sector. The institutional arrangement includes-

- The conditions and mechanisms governing the production, distribution, exchange and holding of financial assets or instruments
- Working of financial markets
- Organization and operation of financial institutions

In other words the financial assets, financial markets and financial institutions as a whole constitute the financial system.

The financial system is different from the payments system. The financial system deals with money, credit and finance and covers both cash and credit transactions. But the payments system is a much narrower concept than the financial system and covers only cash payments.

LET US KNOW



Financial system is an important institutional tool for the transformation of an economy. The financial system incorporates different markets, institutions, instruments, services and mechanisms which further lead to the generation of savings, investment, capital formation and growth. The term financial system is defined as a set of institutional arrangement through which financial surpluses in the economy are mobilized from surplus units and transferred to the deficit units. It is different from the payment system which covers only cash payments. Whereas the financial system covers both cash and credit and deals with money, credit and finance.



CHECK YOUR PROGRESS

Q1. What is financial system?
(Answer in about 50 words)

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Q2. How is financial system different from payment system? (Answer in about 50 words)

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Q3. State whether True or False

a) The financial surpluses in the economy are mobilized from the surplus units and transferred to the deficit units through the financial system.

b) The financial system deals with money, credit and finance.

c) Financial system is same like the payments system.

d) Financial system does not help in capital formation.

13.4 ROLE OF FINANCIAL SYSTEM

The role of financial system can be understood from the points stated below-

- Savings lead to more investment and production of a country which further leads to economic development. Financial system establishes a bridge between the savers and the investors through efficient mobilization and allocation of surplus funds. The financial institutions induce the public to save by offering attractive interest rates. These savings are then channelized by lending to various business concerns which are involved in production and distribution. Besides mobilizing

savings, the financial system helps accelerate the volume and rate of savings by providing diversified range of financial instruments and services through intermediaries.

- Financial system helps in increasing the national output of the country by providing funds to corporate customers to expand their respective business. The capital market, money market along with the foreign exchange market and government securities market enable businessmen, industrialists as well as governments to meet their credit requirements.
- Financial system helps in the development of infrastructure and the growth of a country. A well-developed infrastructure facility is essential for economic development. Financial services play a crucial role by providing funds for the growth of infrastructure industries. With economic liberalization private sector industries have come forward to start infrastructure industry and they are helped by the Development Banks and Merchant banks which raise capital for such industries.
- Financial system leads to international competitiveness. A sophisticated financial system makes innovation the least costly and the most profitable. Financial system encourages diverse financing arrangements in the country which lead to increase in their productive capacity and thus increase international competitiveness of those countries.
- Financial system ensures balanced growth in an economy. Balanced growth, which means growth in all the sectors simultaneously, is necessary for economic development. Primary sector, secondary sector and tertiary sector require adequate funds for their growth. Financial system helps in distributing the available funds in all the sectors in such a way that there will be a balanced growth in all these sectors.
- Financial system helps to promote development of rural areas and the weaker section of the society through the help of the rural development banks and the co-operative societies. These financial institutions encourage savings through proper channel among the rural people and help them with financial assistance wherever needed. They also conduct various programmes in the rural areas. The development of the rural areas further ensures a balanced regional development throughout the country.

- It is with the help of financial system that government can create a favourable business atmosphere so that neither too much of inflation nor depression is experienced. The industries should be given suitable protection through the financial system so that their credit requirements would be met even during the difficult period. The government can raise adequate resources to meet its financial commitments and regulate the financial system through suitable legislation so that unwanted or speculative transactions could be avoided. All these will lead to financial discipline and control of economy.
- The financial system helps in the development of domestic and foreign trade. The financial institutions, finance traders and the financial markets help in discounting financial instruments such as bills. It not only helps the traders but also various financial institutions. Foreign exchange is also earned by the country because of the presence of financial system.
- Financial system attracts foreign capital. It promotes capital market. A dynamic capital market is capable of attracting funds both from domestic sources and abroad. With more capital, investment will expand and this will increase the rate of economic development of the country.
- A sound and dynamic financial system contributes to macro economic stability. Macro economic stability is conducive for socio-political stability of the country. This further enhances the prospect of growth and development.



LET US KNOW

Financial system plays an important role in the economy and this can be understood by the given points-

- Financial system encourages savings and investment
- Financial system increases national output of the economy
- Financial system helps in infrastructure and growth of a country
- Financial system leads to international competitiveness
- Financial system ensures balanced growth
- Financial system helps in the development of backward and rural section of the country

- It leads to financial discipline in the economy
- Financial system helps in the development of domestic and foreign trade
- It attracts foreign capital
- It helps in maintaining socio-political stability.



CHECK YOUR PROGRESS

Q4. Discuss the role of financial system in the development of a country. (Answer in about 100 words)

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Q5. How does financial system increase savings and investment in the country? (Answer in about 60 words)

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Q6. Explain how financial system develops the backward section of a society. (Answer in about 50 words)

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Q7. Answer True or False:

a) Financial system leads to decline in national output.

b) Financial system attracts foreign capital.

13.5 COMPONENTS OF FINANCIAL SYSTEM

There are four main components of the financial system. They are-

- Financial Assets or Instruments
- Financial Markets
- Financial Institutions
- Financial Services
- **Financial Assets or Instruments:** Financial assets or near money assets are the claims on real sector units or claims on FIs (Financial Institutions) and perform some functions of money. The financial asset/ instrument is any document which is an evidence of debt, and the sale or transfer of which enables the seller to acquire finance. Examples of financial asset/instruments are bills, bonds, CDs, other securities etc. These are subdivided under two categories- primary or direct assets and secondary or indirect assets.

  - **Primary or Direct Assets:** Primary assets are the financial claims against real sector units. e.g. bills, bonds, equities, book debits etc. They are created by real sector units as ultimate borrowers for raising funds to finance their deficit spending.

  - **Secondary or Indirect Assets:** Secondary assets are financial claims issued by financial institutions against themselves to raise funds from the public. e.g. bank deposits, life insurance policies, Units of mutual funds. These assets are obligations of the financial institutions.

The financial assets or instruments possess certain characteristics. They are-

- **Transferability:** Most of the financial assets possess the quality of transferability which means that, they can be easily transferred from one hand to another without much difficulty.
- **Marketability:** Financial assets have a ready market which means that they can be bought and sold frequently and thus trading in these securities is made possible.
- **Liquidity:** Financial assets possess liquidity. Many of these instruments can be converted into cash readily.

- **Tax Status:** Some of the financial assets enjoy tax benefits i.e. investment in these securities is exempted from income tax, wealth tax etc. subject to certain limit.
- **Risk of Default:** It means that the financial assets carry risk as there is uncertainty with regard to the payment of principal or interest or dividend whichever may be the case.
- **Maturity Period:** Financial assets may be short term, medium term or long term depending upon its maturity period.
- **Rate of Return:** The return on these assets is generally directly related to the risk undertaken.

- **Financial Markets:**

The financial system of a country works through the financial markets and financial institutions. Financial markets are very much like the markets for goods and services. Instead of goods and services financial markets deals in financial assets and instruments of different types such as currency, deposits, cheques, bills, bonds etc. Following are the functions of financial markets:

- They create and allocate credit
- They serve as intermediaries in the process of mobilization of saving
- They provide convenience and benefits to the leader and borrowers
- They promote economic development through a balanced allocation of funds.

Financial markets are broadly sub divided into two categories – money markets and capital markets.

- **Money Market:** Money market deals with the short term borrowing and lending of funds. In the money market the short term securities are exchanged. It is a highly liquid market wherein securities are bought and sold in large denominations to reduce transaction costs. Money market is further divided into organized and unorganized sectors. The organized sector includes call

money market, bill market, bank loans. The unorganized sector includes hundis and loans from indigenous bankers, money lenders and others.

- **Capital Market:** Capital market, on the other hand, deals with the medium term and long term borrowing and lending of funds. Like the money market capital market is also divided into two sectors – organized and unorganized. The organized sector comprises of stock market and loans from banks and non -banking financial institutions. The unorganized sector on the other hand comprises of loans from money lenders and others.

- **Financial Institutions:**

Financial institutions are intermediaries that mobilize savings and facilitate the allocation of funds in an efficient manner. They borrow funds or accept deposits from those who are willing to give up their current purchasing power and lend to or buy securities from those who require the funds for meeting the current expenditures. So the main function of financial institutions is to collect the surpluses of the economic units and lend them to the deficit spenders. Financial institutions are generally divided into two categories.

- **Banking institutions**

- **Non - Banking Financial Institutions**

Banking institutions are the creators of credit and non-banking financial institutions only provide with credit. The liabilities of banks are part of money supply; but this is not true for non-banking financial institutions. In India non-banking financial institutions namely the developmental financial institutions (DFIs) and non-banking financial companies (NBFCs) as well as housing finance companies (HFCs) are major institutions that supply credit. There is further classification of financial institutions- term finance institutions such as the Industrial Development Bank of India (IDBI), Industrial Credit and Investment Corporation of India (ICICI), Industrial Financial Corporation of India (IFCI), Industrial Investment Bank of India (IIBI) and Small Industries Development Bank of India (SIDBI).

Financial institutions are dealers in securities. The securities which they buy are primary securities and the ones that they sell are secondary securities.

- **Financial Services:**

Financial services can be defined as the products and services offered by the financial institutions for the facilitation of various financial transactions and other related activities. Financial institutions and financial markets help in the working of the financial system through financial instruments. To be able to carry out the jobs given they need several services of financial nature. That is why financial services are necessary. Therefore financial services are considered as the fourth major component of financial system. Financial services provided by the financial institutions bridge the gap between lack of knowledge on the part of investors and increasing sophistication of financial instruments and markets. They help with borrowing, selling and purchasing securities, lending and investing, making and allowing payments and settlements and taking care of risk exposures in financial markets. These range from the leasing companies, mutual fund houses, merchant bankers, portfolio managers, bill discounting and acceptance houses. Some of the financial services that are offered are credit rating, mutual funds, merchant banking, depository services, book building etc.

LET US KNOW



Financial System has mainly four components- financial assets, financial markets, financial instruments and financial services. Financial assets are the claims on real sector units or FIs and perform some functions of money. These are subdivided into two categories- primary or direct securities and secondary or indirect securities. Financial markets deal with financial assets and instruments of different types such as currency, deposits, bills, bonds etc. Financial institutions are intermediaries that mobilize savings and facilitate the allocation of fund in an efficient manner. Financial institutions are subdivided into banking and non-banking institutions. Banking institutions are the creators of credit and non- banking institutions are the purveyors of credit. Financial services sector offers a number of professional services like credit rating, mutual funds, merchant banking, depository services, book building etc.



CHECK YOUR PROGRESS

Q8. What are the components of financial system? (Answer in 20 words)

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Q9. Define financial assets. (Answer in about 40 words)

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Q10. Define financial services. (Answer in about 40 words)

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13.6 LET US SUM UP

- For the purpose of economic transformation the financial system is one of the most important institutional and functional tools. It is a systematic approach through which exchange of funds between lenders, borrowers and investors take place. A sound financial system is desired by every economy for its proper functioning. The term financial system refers to a set of institutional arrangement through which financial surpluses in the economy are mobilized from surplus units and transferred to the deficit units. The institutional arrangements include the conditions and mechanisms governing the production, distribution, exchange and holding of financial assets; working of financial markets and organization and operation of financial institutions.

- The financial system is different from the payments system where the latter only covers cash payments while financial system covers both credit and cash transactions.

- Financial system encourages savings and investment, enhances national output of the economy ,helps in infrastructure and growth of a country, leads to international competitiveness and Financial system ensures balanced growth.

- Financial assets or instruments are the claims on real sector units or FIs and perform some function of money. They are sub-divided into primary or direct assets and secondary or indirect assets. Primary assets are the financial claims against real sector units and secondary assets are financial claims issued by financial institutions against themselves to raise funds from public.

- Financial market is a market in which people trade financial assets and instruments of different types such as currency, deposits, cheques, bills, bonds etc. Financial markets are sub divided into money markets and capital markets. Money market deals with the short term borrowing and lending of funds. For example, call money market, bill market etc. Capital market on the other hand deals with medium term and long term borrowing and lending of firms. For example, stock market, government securities market etc.

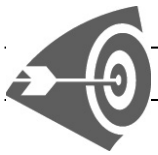
- Financial institutions are intermediaries that mobilise savings and facilitate the allocation of funds in an efficient manner. The main function of financial institutions is to collect the surpluses of the economic units and lend them to the deficit spenders. Financial institutions are generally divided into banking and non-banking institutions. Banking institutions are the creators of credit and non-banking institutions are the purveyors of credit.

- Financial services can be defined as the products and services offered by the financial institutions for the facilitation of various financial transactions and other related activities. They help with borrowing, selling and purchasing securities, lending and investing, making and allowing payments and settlement and taking care of risk exposures in financial markets.



13.7 FURTHER READING

- Gupta, B. (2003). *Monetary Economics: Institutions, Theory and Policy.* New Delhi: S. Chand & Company Ltd.
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- Pathak, B. V. (2010). *The Indian Financial System: Markets, Institutions and Services.* India: Pearson.
- Paul, R. R. (2009). *Money Banking and Public Finance.* New Delhi: Kalyani Publishers.



13.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q no 1: Financial system refers to a set of institutional arrangement through which financial surpluses in the economy are mobilized from surplus units and transferred to the deficit units. The institutional arrangements include the conditions and mechanisms governing the production, distribution, exchange and holding of financial assets; working of financial markets and organization and operation of financial institutions.

Ans to Q no 2: The financial system is different from the payments system. Payments system covers only cash payments while financial system covers both cash and credit transactions. Payments system is a much narrower concept than financial system.

Ans to Q no 3: a) True, b) True, c) False, d) False

Ans to Q no 4: The importance of financial system can be understood from the following points given below-

- Financial system encourages savings and investment
- Financial system increases national output of the economy
- Financial system helps in infrastructure and growth of a country
- Financial system leads to international competitiveness

- Financial system ensures balanced growth
- Financial system helps in the development of backward and rural sector of the economy
- Financial system leads to financial discipline and control of the economy
- Financial system helps in development of foreign and domestic trade
- Financial system attracts foreign capital
- Financial system helps in maintaining socio- political stability

Ans to Q no 5: Financial system establishes a bridge between the savers and the investors through efficient mobilization and allocation of surplus funds. The financial institutions induce the public to save by offering attractive interest rates. These savings are then channelized by lending to various business concerns which are involved in production and distribution. Besides mobilizing savings it provides with diversified range of financial instruments and services through intermediaries and thus it leads to increase in savings and investment in the country.

Ans to Q no 6: Financial system helps to promote development of the backward section of the society through the help of the rural development banks and co-operative societies. These financial institutions encourage savings through proper channel among the rural people and help them with financial assistance wherever needed

Ans to Q no 7: a) False , b) True

Ans to Q no 8: Following are the components of financial system:

- Financial Assets
- Financial Markets
- Financial Institutions
- Financial Services

Ans to Q no 9: Financial assets or near money assets are the claims on real sector units or FIs and perform some function of money. These are subdivided under two categories- primary or direct assets and secondary or indirect assets.

Ans to Q no 10: Financial services can be defined as the products and services offered by the financial institutions for the facilitation of various

financial transactions and other related activities. e.g. credit rating, mutual funds, merchant banking, depository services, book building etc.



13.9 MODEL QUESTIONS

Short Questions (Answer each question in about 150 words)

Q1: What is financial system?

Q2: How is financial system different from the payments system?

Q3: Write a short note on Financial Services.

Q4: What is financial market?

Essay- type Questions (Answer each question in 300-500 words)

Q1: Discuss the role of financial system.

Q2: Financial system leads to financial discipline and control of the economy. Discuss

Q3: What are the components of financial system? Explain

Q4: Explain the various types of financial markets.

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UNIT 14 : CAPITAL MARKET

UNIT STRUCTURE

14.1 Learning Objectives

14.2 Introduction

14.3 Capital Market

14.4 Primary and Secondary Market

14.5 Role of Stock Exchange in the Economy

14.6 Let Us Sum Up

14.7 Further Reading

14.8 Answers to Check Your Progress

14.9 Model Questions

14.1 LEARNING OBJECTIVES

After going through this unit, you will be able to :

- discuss the basic nature of the capital markets and what constitute these markets
- outline the broad divisions of the capital market i.e. primary market and secondary market and how these markets operate
- explain the concepts of stock market and the stock exchange
- discuss the working and role of the stock market in the development of the capital market and thereby the economy.

14.2 INTRODUCTION

In the earlier unit you have learned about the financial system which is a set of institutional arrangements through which financial surpluses in the economy are mobilized from surplus units and transferred to deficit spenders. Apart from it, you have also learned about the constituents of financial market such as *financial assets, financial markets, financial institutions and financial services.* In this unit and in the next we will be concerned with the financial market alone. A financial market again refers to an institution or an arrangement that facilitates the exchange of financial assets, including deposits and loans, corporate stocks and bonds, government bonds and so on. Depending on the nature of the assets traded, a financial

market is further classified into money market and capital market. In this unit we will particularly study about the capital market and in the next unit we will study exclusively the money market.In the present unit an endeavour is made to give an introductory exposure to capital market, primary and secondary market, the financial assets that are traded in these markets, functions and importance of these markets, and to bring out the economic significance of the stock market.

14.3 CAPITAL MARKET

The term 'capital market' refers to a market, or more realistically, a group of interrelated markets, in which capital in financial or monetary form is lent and borrowed, on varying terms and for varying periods. The capital market deals in medium term and long term loans. The producing sector of the economy comprising of business firms and corporations approach the capital market to get funds required for purchasing capital equipment and fixed assets, such as machines, plants, construction of factory etc.

In the capital market there are assets that are freshly issued and assets that are old and already traded. Accordingly, a capital market can be broadly classified into a primary and a secondary market. A very significant component of the capital market is the stock market. A stock market is an institution where *stocks* and *shares* are traded. They exist in all modern market economies.



CHECK YOUR PROGRESS

Q 1: What is a capital market? (Answer in about 30 words)

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Q 2: What are the main constituents of a capital market? (Answer in about 20 words)

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Q 3: Trace out the differences between a capital market and a money market. (Answer in about 40 words)

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14.4 PRIMARY AND SECONDARY MARKET

We have learnt that the capital market refers to the institutional arrangement where long term funds are lent and borrowed. The broadest way to categorize a capital market is to distinguish between a *primary market and a secondary market.*

The primary market refers to that market where financial assets are sold for the first time. In the primary market the new issues of financial assets are bought and sold. For instance, when Reliance Power issues a new share or stock, (stock that has never been owned by an investor before) the stock is sold in the primary market. Thus, the New Issues Market is an example of primary market. The new issues attract fresh capital investment.

In contrast, the existing securities are bought and sold in the secondary market. Thus it is the market where the assets sold in the primary market are subsequently traded. The secondary market specializes in buying and selling old securities, shares, stocks, bonds, debentures etc. The National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) are examples of secondary market. If one wants to sell the Reliance Power stock bought in the primary market, he/she has to do it in the secondary market. The person who wants to buy this share will purchase it in the secondary market. Thus, the secondary market determines the ownership of existing securities i.e. to whom they are transferred.

The most important component of the capital market is the stock market. It is the stock market organization that provides separate arrangement for the new issues of securities and buying and selling of old securities. As we already know, the former is called the New Issues Market or the Primary Market and the latter is known as the Secondary Market.

The Primary Market: The essential function of this market is to arrange for the raising of new capital by corporate enterprises. This is done by offering new issues of securities. The new issues may take the form of equity shares, preference shares or debentures. The firms raising funds may be new companies or existing companies planning expansion. For inducing the public to invest their savings in new issues, the services of a network of institutions such as underwriters and stock brokers is required. The practice of offering new issues to the public is called **floatation**. There are three main ways of floating new issues. These are: the issue of a prospectus to the public, by private placement and by the right issue of the existing shareholders.

- The *public prospectus* gives detail about the company, the issue, and the underwriters (underwriters give guarantees of purchasing a stipulated amount of a new issue at a fixed price), and is an open invitation to the public to subscribe to the issue.
- *Private placement* means that the issue is not offered to the general public, but placed privately with a few big private financiers. This is more economic as it saves the company the expenses involved with the public placement.
- Rights issue means the issue of invitation to the existing share holders of an old corporation to subscribe to a part or whole of the new issue in a fixed proportion to their share holding. Such issue is always offered at a price which is lower than the existing market price of the already trading shares of the company.

The Secondary Market: As we already know, this market deals in existing securities. The existence of a secondary market for a financial asset enhances the asset's liquidity. In fact, providing liquidity to traded securities is the main function of the secondary market. It does so by providing an institutional arrangement where a security can be bought and sold at any time during working hours at a small transaction cost. This function of providing liquidity encourages fresh investments in new securities in the following ways:

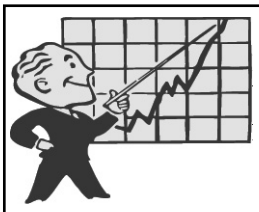
- It gives the investors the opportunity to sell their shares any time they want in the market.
- It indicates the investment climate in the economy. When existing stock prices are high, it encourages new issues as the new issue

market becomes better prepared and more willing to accept new issues.

- It provides an opportunity to those investors who want to make a gain by selling the new issues bought in the primary market when their prices go up. With this gain along with the original capital, it puts fresh liquidity in the hands of these investors who then can move into other new issues coming into the market.

Segments of Secondary Market: There are two segments of a secondary market- *over the counter market,* and the *organized stock exchange*.

- The over the counter market deals in such securities which are not listed in any stock exchange. These securities are from small companies and have only a limited market. Their prices are determined through direct negotiations between stock brokers.
- The main action of the stock market takes place in the organised stock exchange. A stock exchange is an organization for orderly buying and selling of listed existing securities. It includes an association of individuals and firms and is run under well set rules, regulations and standard practices. Some examples of stock exchanges are the London Stock Exchange, the New York Stock Exchange and the Bombay Stock Exchange. In every stock exchange there is an exchange floor or hall where stock brokers or their authorized agents meet during working hours to buy and sell security. Organized stock exchange is an auction type market where prices of traded securities are settled by open bids and offers on the floor of the exchange. Thus prices in the stock exchange are formed competitively. This competitive pricing enables a better run and more profit making company to attract funds. This is a very positive aspect as far as allocation of new resources is concerned.



CHECK YOUR PROGRESS

Q 4: State the difference between the primary and the secondary market. (Answer in about 40 words)

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Q 5: What are the three main ways of floating a new issue? (Answer in about 30 words)

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Q 6: What is a stock exchange? Name two stock exchanges of India. (Answer in about 40 words)

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14.5 ROLE OF STOCK EXCHANGE IN THE ECONOMY

The stock market is one of the most powerful institutions in the capitalist world. Many observe that stock market in the past has played a vital role in building the modern world. Every market economy saw the development of its basic infrastructure such as railways, power sector, energy, as well as utility concerns and industrial and commercial activities which bear the stamp of the invaluable services rendered by the stock market. In the growth oriented modern world the stock market has become the heart centre of the economic set up. For any country that has embarked on the path of development through private enterprise or a private and public enterprise within a democratic set up, the stock market is an indispensable institution. The organization that makes the smooth functioning of the stock market possible is the stock exchange.

In the following we are delineating the role of the stock exchange in a modern economy:

- The stock exchange plays a crucial role in promoting capital formation in a country by mobilizing savings and channelising them into appropriate avenues of investment. It mobilizes savings by providing an organized market in diverse type of securities suiting the interests of a vast number of savers about liquidity, profitability, and risk aversion. It encourages investment by creating conditions which ensure availability of financial resources for the creation of capital stock.

- New issues raise capital for fresh venture. But the success of new issues depends upon the existing issues. Thus, the stock exchange, in addition to providing a market to already existing securities, assists in the provision of new capital for industrial and other borrowers. Enterprises, whether new or old, big or small, when assured of regular flow of funds through sale of shares and securities at a small capital cost, can embark upon industrial expansion that may result in higher level of production.
- The stock exchange also enables an investor to shift from one type of investment to another according to his investment priorities. This freedom creates the willingness to venture into investment.
- The listed companies in a stock exchange provide a very wide choice of investment avenues. Accordingly an investor can spread his risks by acquiring securities of different industries in varying proportions. This is an essential element in modern investment.
- A stock exchange creates a cluster of shares and stock brokers, underwriters and other experts in financial matters who educate public opinion about the soundness of new issues. They also offer expert advice to prospective investors regarding the appropriate securities and the opportune time to invest in them.
- A stock exchange extends valuable support to the government that needs to borrow large funds for financing developmental programmes. It does this by providing an organized market for government bonds.
- In the developing countries not only is the volume of savings is low, but also a large part of it is dissipated in conspicuous consumption and hoarding because of the lack of knowledge in investment opportunities, high liquidity preference, and some other non-economic factors. A well organized stock exchange with vision can promote conditions which take care of some of these inhibiting conditions.

From the above discussion we can easily infer that stock exchanges are the pre-requisite for mobilization and creation of savings, their proper and profitable allocation and also for inducing large scale investment in the economy. But we should also note that the stock market activities are subject to misinformation, wild speculation, and unscrupulous activities that

can destroy the wealth of investors. Here, the *regulatory role* of the stock exchange becomes crucial. The stock exchange must ensure smooth, transparent and proper functioning of the market by constantly playing the role of the watch dog, enforcing prudent rules and regulations, and removing market imperfections.



CHECK YOUR PROGRESS

Q 7: How does a stock exchange enable an investor to spread risk in investment? (Answer in about 40 words).

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Q 8: How do stock exchanges help promoting savings and investment in a developing economy? (Answer in about 50 words)

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Q 9: What do you mean by the regulatory role of a stock exchange? (Answer in about 40 words)

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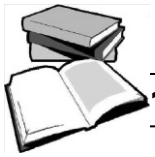
14.6 LET US SUM UP

- In any financial system there are four main constituents. They are: *financial assets, financial markets, financial institutions and financial Services.*
- A financial market refers to an institution or an arrangement that facilitates the exchange of financial assets, including deposits and loans,

corporate stocks and bonds, government bonds and so on. Depending on the nature of the assets traded, a financial market is further classified into money market and capital market.

- The capital market refers to a market, or more realistically, a group of interrelated markets, in which capital in financial or monetary form is lent and borrowed, on varying terms and varying periods. The capital market deals in medium term and long term loans.
- The broadest way to categorize a capital market is to distinguish between a primary market and a secondary market.
- The primary market refers to that market where financial assets are sold for the first time. In the primary market the new issues of financial assets are bought and sold.
- The existing securities are bought and sold in the secondary market. Thus it is the market where the assets sold in the primary market are subsequently traded. The secondary market specializes in buying and selling of old securities, shares, stocks, bonds, debentures etc.
- The most important component of the capital market is the stock market. It is the stock market organization that provides separate arrangement for the new issues of securities and buying and selling of old securities.
- The practice of offering new issues to the public is called floatation. There are three main ways of floating new issues. These are: the issue of a prospectus to the public, by private investment, and by the right issue of existing share holders.
- There are two segments of a secondary market- *over the counter market,* and the *organized stock exchange*. The over the counter market deals in such securities which are not listed in any stock exchange. These securities are from small companies and have only a limited market. Their prices are determined through direct negotiations between stock brokers.
- The main action of the stock market takes place in the stock exchange. A stock exchange is an organization for orderly buying and selling of listed existing securities. It includes an association of individuals and firms and is run under well set rules, regulations and standard practices.
- Stock exchanges play both developmental and regulatory role in the capital market. They are pre-requisite for mobilization and creation of

savings, their proper and profitable allocation and also inducing large scale investment in the economy. But we should also note that the stock market activities are subject to misinformation, wild speculation, and unscrupulous activities that can destroy the wealth of investors. Here the regulatory role of the stock exchange becomes crucial.



14.7 FURTHER READING

- Gupta, S. B. Gupta (1999). *Monetary Economics – Institutions, Theory and Policy*.New Delhi: S .Chand and Company Ltd.
- Paul, R. R. (2008). *Monetary Economics.* Ludhiana: Kalyani Publisher



14.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1:A capital market refers to a market, or a group of interrelated markets, in which capital in financial or monetary form is lent and borrowed, on varying terms and for varying periods. It deals in medium term and long term loans.

Ans to Q No 2: In any capital market there are two main constituents. They are: primary market and secondary market.

Ans to Q No 3: While a primary market deals in freshly issued assets, a secondary market deals in old and already traded assets.

Ans to Q No 4: It is the stock market organization that provides a separate arrangement for the new issues of securities and buying and selling of old securities. The former is called the New Issues Market or the Primary Market and the latter is known as the Secondary Market.

Ans to Q No 5: There are three main ways of floating new issues. These are:

a) By the issue of a prospectus to the public,

b) By private placement, and

c) By the right issue of the existing shareholders.

Ans to Q No 6: A stock exchange is an organization for orderly buying and selling of listed existing securities. It includes an association of individuals and firms and is run under well set rules, regulations and standard practices. Two examples of stock exchanges are- the National Stock Exchange and the Bombay Stock Exchange.

Ans to Q No 7: The listed companies in a stock exchange provide a very wide choice of investment avenues. Accordingly an investor can spread his risks by acquiring securities of different industries in varying proportions.

Ans to Q No 8: The stock exchange plays a crucial role in promoting capital formation in a country by mobilizing savings and channelising them into appropriate avenues of investment. It mobilizes savings by providing an organized market in diverse types of securities suiting the interests of a vast number of savers about liquidity, profitability, and risk aversion. It encourages investment by creating conditions which ensure availability of financial resources for creation of capital stock.

Ans to Q No 9: The stock exchange must ensure smooth, transparent and proper functioning of the market by constantly playing the role of the watch dog, enforcing prudent rules and regulations, and removing market imperfections. This is known as the regulatory role of the stock exchange.



14.9 MODEL QUESTIONS

Short Questiions (Answer each question in about 150 words)

Q 1: Explain the concepts ‘capital market’ .

Q 2: Distinguish between the ‘capital market’ and ‘money market’.

Q 3: What is a Stock Exchange?

Q 4: What is floatation?

Essay-type Questions (Answer each question in about 300-500 words)

Q 1: Discuss the broad divisions of a capital market.

Q 2: Explain the various ways of floating a new issue.

Q 3: Discuss the role of a Stock Exchange in a modern market oriented economy.

Q 4: Discuss the main differences between the primary and the secondary market?

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UNIT 15: MONEY MARKET

UNIT STRUCTURE

15.1 Learning Objectives

15.2 Introduction

15.3 Money Market

15.4 Role of Money Market in the Economy

15.5 Instruments in the Money Market

15.6 Inter-relations between Money Market and Capital Market

15.7 Let Us Sum Up

15.8 Further Reading

15.9 Answers to Check Your Progress

15.10 Model Questions

15.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- understand what money market implies
- explain the role of money market in the economy
- comprehend different money market instruments
- spell out the inter-relation between money market and capital market.

15.2 INTRODUCTION

The money market is a market for short-term instruments that are highly liquid and easily marketable. The study of money market is so wide that it cannot be precisely defined. In this unit, we shall try to look at the meaning and features of money market and also its role in the economy.

The money market consists of call and notice market, commercial bills market, commercial paper market, treasury bill market and certificates of deposits market. In this unit, we shall discuss briefly

about these instruments of money market. This unit will also enable you to state the inter-relation of money market with capital market.

15.3 MONEY MARKET

Money market refers to the institutional arrangements facilitating borrowing and lending of short-term funds. In a money market , funds may be borrowed for periods varying from a maturity period of one year or less, against different types of instruments such as bills of exchange, short-term securities, banker's acceptances, etc. called 'near money'. The money market provides funds to finance production and distribution. It helps promote economic growth of the country.

The Reserve Bank of India is the most important constituent of the money market. The market comes within the direct purview of the Reserve Bank regulations.

Money market is not a unique place or mechanism where short- debt instruments are traded among the investors; rather there are several locations where direct transactions take place between borrowers and lenders. Under an efficient system to handle any amount and volume of transactions at any time, regional sub-markets are also linked together with the centrally organized market.

The basic characteristics of money markets are given below:

- Short-term securities with maturity of less than one year are traded in the money market.
- Central and regional short-term markets create a national short- term interest rate structure.
- They also create a national short-term credit.
- Idle funds are transferred through the intermediaries from all over the country to the central open market.
- Funds are largely transferred on a wholesale basis, although the large institutions deal directly with each other.
- The role of the institutions involved in the money market is controlled by the monetary and credit system of the country.
- The major participants in the money market are Reserve Bank of India (RBI), Discount and Finance House of India(DFHI), Mutual Funds,

Banks, Non-Banking Finance Companies(NBFCs), state governments, etc.

15.4 ROLE OF MONEY MARKET IN THE ECONOMY

Money market plays a key role in banks' liquidity management and the transmission of monetary policy. In normal times, money markets are among the most liquid in the financial sector. A developed, active and efficient interbank market enhances the efficiency of central bank's monetary policy, transmitting its impulses into the economy. Thus, the development of the money market smoothes the progress of financial intermediation and boosts lending to the economy, thereby improving the country's economic and social welfare. We can discuss the role of money market in the economy as follows:

- **Stable Source of Funds:** It provides short term funds to the public and private institutions needing such financing for their working capital requirements. It is done by discounting trade bills through commercial banks, discount houses, brokers and acceptance houses. Thus the money market helps in the development of commerce, industry and trade within and outside the country.
- **Liquidity:** Money market promotes liquidity and safety of financial assets. It does so by providing a platform where financial assets can be converted into cash at ease within a short period.
- **Encouragement to Saving and investment:** Money market encourages surplus units to save which results in encouragement to investment in the economy. The saving and investment equilibrium of demand and supply of loanable funds helps in the allocation of resources.
- **Transmission of Monetary Policy:** A well developed money market helps in the successful implementation of the monetary policies of the central bank. It is through the money market that the central bank is in a position to control the banking system and thereby influence commerce and industry.
- **Controls the Price Line:** Money market plays an important role in controlling the price line. Higher rates in the money markets decrease the liquidity in the economy and have the effect of reducing the economic

activity in the system. On the other hand, by reducing the rates the liquidity in the market can be increased and reduced the cost of capital .This is conducive for investment.

15.5 INSTRUMENTS IN THE MONEY MARKET

Investment in money market is done throughout money market instruments. Money market instrument meets short-term necessities of the borrowers and provides liquidity to the lenders. Money market instruments are as follows:

- **Treasury Bill (T-Bill)**

Treasury Bill is a particular kind of finance bill or a promissory note put out by the Reserve Bank of India (RBI) on behalf of the government at low transaction cost. This instrument is used by the government in order to overcome short term deficiencies in liquidity,i.e.,to fill the gaps between the government receipts and expenditure. The important qualities of treasury bills are :(a) the high liquidity, (b) absence of risk of default, (c)ready availability, (d)assured yield, (e) low transaction cost, (f) eligibility for inclusion in statutory liquidity ratio (SLR), and (g)negligible capital depreciation.

T-bills can be classified into three categories. They are-

- **On-Tap Bills:** These bills could be bought from the Reserve Bank at an interest of 4.66 percent. But with time they lost their importance and eventually they were discontinued from 1st April, 1997.
- **Adhoc-Bills :** The instrument of adhoc treasury bill and the system of issuing it were introduced in India in 1955 for enabling the government to meet the needs of supplementary short -term finance. It was decided that the government shall maintain with the RBI a cash balance of not less than Rs.50 crore on Fridays and Rs.4 crore on other days free of obligation to pay interest thereon, and whenever the balance falls below these minimums, the government account would be replenished by the creation of adhocs in favour of the RBI. But these bills were also discontinued from 1st April, 1997.
- **Auctioned T-Bills:** The most active money markets instrument, Auctioned T-Bills, were introduced in April 1992 where the Reserve

Bank receives bids in an auction from different participants and issues the bills subject to some cut-off limits. At the present date, T-bills are issued for 91 days, 182 days, and 364 days.

- **Commercial Papers (CPs)**

The CPs were introduced by RBI in January, 1990. CPs are unsecured short-term promissory notes, negotiable and transferable by endorsement and delivery with a fixed maturity period. CPs are issued mostly by the leading, nationally reputed, credit-worthy and highly-rated large corporations.

CPs are usually sold at a discount, which is freely determined by market forces. The paper is usually priced between the lending rate of scheduled commercial banks and a representative money market rate. There are certain guidelines/norms issued by the authorities in respect of the sale of CPs which are broadly described below:

- The tangible net worth of the issuing company should not be less than Rs.4 crore
- The fund - based working capital limit of the company should not be less than Rs.4 crore
- The company can issue CPs to the extent of 75 percent of working capital limit
- The minimum denomination of CPs is to be Rs. 5 lakh, and the minimum size of an issue to a single investor is to be Rs. 25 lakh
- There is no need for prior approval of the RBI to make on issue of CPs
- The holder shall present CPs for payment to the issuing company on maturity.

CP is a good instrument to raise short-term finances but this instrument is still in an under-developed state in India. There is no active secondary market for CPs. CP issues involve administrative difficulties and complex formalities which inhibited the growth of this market. Again, the minimum maturity period of 7 days also inhibit the growth of the CP market. Even then, the CP is a good instrument to raise short-term finances.

- **Call Money Market**

Call money market is that part of the national money market where the day-to-day surplus funds, mostly of banks, are traded in. The loans made in this market are of a short-term nature, their maturity varying between one day to 14 days. If the transaction takes place in 1 day then it is called money at call but if transaction requires more than 1 day then it is called money at short notice.

Commercial banks have to maintain a minimum cash balance known as the Cash Reserve Ratio (CRR). Call money is a method by which banks lend to each other to be able to maintain the cash reserve ratio. The interest rate paid on call money is known as the call rate. It is a highly volatile rate that varies from day to day and sometimes even from hour to hour. Since non-bank entities are not allowed to participate in the call money market, it is also called inter-bank market. There is an inverse relationship between call rates and short-term money market instruments such as certificates of deposits and commercial paper. A rise in call money rates makes other sources of finance, such as commercial paper and certificates of deposits, cheaper in comparison for banks to raise funds from these sources.

Though the call money market is considered as the advanced money market among developing countries yet it is not an effective instrument to mobilize resources. It is because there is lack of proper integration between organized and unorganized sectors and there are poor number of dealers in the short-term assets who can act as mediators between the government and the banking system.

- **Certificate of Deposits(CD)**

CD refers to a money market instrument, which is negotiable and equivalent to a promissory note which is issued by commercial banks and financial intermediaries. CDs were introduced in June 1989 by the RBI. The main purpose was to enable the commercial banks to raise funds from market.

Generally it is an agreement between a depositor and the bank that the depositor won't withdraw the money for a certain amount of time in return for earning interest on those funds. The commercial banks can issue CDs for a maturity within 7 days to 1 year. But for

CDs issued by the financial institutions, the maturity period varies from 1 year to 3 years.

Like other time deposits, CDs are subjected to SLR and CRR requirements. There is no ceiling on the amount to be raised by banks. CDs are issued by banks during periods of tight liquidity, at relatively high interest rates. There are number of investors who can invest in CDs like individuals, corporations, companies, trusts, funds, etc. The NRIs can also invest in CDs but in their case they are not transferable.

There is a large scope for the development of CDs but there are some hindrances which limit the growth of CDs. The biggest drawback of CDs is that transactions in the secondary market have not developed because the numbers of participants are limited, interest rates are quite high. Again there is no facility of loans against the deposits. The CDs also carry a fixed rate of interest.

- **Commercial Bills or Bills of Exchange**

The financial instrument which is traded in the bill market is a bill of exchange. It is used for financing a transaction in goods that takes some time to complete. It shows the liability to make payment on a fixed date when goods are bought on credit. The commercial bills have a high degree of liquidity and are riskless.

There are various types of bills of exchange in the market. They are summarized below:-

- **Demand Bill and Usance Bill:** A demand bill is payable immediately 'at sight' or 'on presentment' to the drawee. A bill in which the time for payment is specified is considered to be as demand bill. On the other hand, Usance bill is payable at a specified later date. The term 'Usance' refers to the time period recognized by custom or usage for the payment of bills.

- **Clean Bills and Documentary Bills:** In clean bills the documents are enclosed and delivered against acceptance by the drawee while in case of the documentary bills, the documents are delivered against payment accepted by the drawee and the banks hold the documents till the bill is paid.

- **Inland Bill and Foreign Bills:** Inland bills must (a) be drawn or made in India, and must be payable in India, or (b) be drawn upon

any person resident in India. Foreign bills, on the other hand, are (a) drawn outside India and may be payable in and by a party outside India, or may be payable in India or drawn on a party resident in India, or (b)drawn in India and made payable outside India.

In India the use of Bills of Exchange appears to be in vogue for financing agricultural operations, cottage and small -scale industries, and other commercial and trade transactions. While agricultural bills are drawn for financing seasonal agricultural operations, marketing of crops; cottage and small industries bills are drawn for financing their production and marketing activities.

But commercial bills are underdeveloped due to the absence of secondary market and the credit system is still more popular than the transaction in commercial bills. There is no uniformity in drawing commercial bills across the country and they carry high stamp duties.

15.6 INTER-RELATIONS BETWEEN MONEY MARKET AND CAPITAL MARKET

The money market and capital market are closely interrelated because most corporations and financial institutions are active in both. Firms may borrow funds from the money market for a short period or for a long period from the capital market. A number of factors may prompt borrowers and lenders to resort to either the money market or the capital market which reflect the interdependence of the two markets. They are discussed below:-

- Lenders may choose to direct their funds to either or both markets depending on the availability of funds, the rates of return, and their investment policies.
- Borrowers may obtain their funds to either or both markets according to their requirements. A firm may borrow short -term funds by selling commercial paper or it may float additional shares or bonds.
- Some corporations and financial institutions serve both markets by buying and selling short-term and long-term securities.
- All long-term securities become short-term instruments at the time

of maturity. So some capital market instruments also become money market instruments.

- Funds flow back and forth between the two markets whenever the treasury finances the maturity bills with treasury securities or whenever a bank lends the proceeds of a maturity bond to a firm on a short-term basis.

- Yields in the money market are related to those of the capital market. A fall in the short-term interest rates in the money market shows a condition of easy credit which is likely to be followed or accompanied by a more moderate fall in long-term interest rates in the capital market. However, money market interest rates are more sensitive than are long-term interest rates in the capital market.



CHECK YOUR PROGRESS

Q 1: Write a short note on money market. (Answer in about 40 words)

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Q 2: What are the instruments of the Indian money market? (Answer in about 30 words)

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Q 3: Give one distinction between demand bill and usance bill. (Answer in about 40 words)

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Q 4: What is bill of exchange? (Answer in about 40 words)

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15.7 LET US SUM UP

- The money market is a market for financial assets that are close substitutes for money. It is a market for overnight to short-term funds and instruments having a maturity period of one or less than one year.
- The instruments traded in the Indian money market are treasury bills (T-bills), call/notice money market - call(overnight) and short notice (upto 14 days), commercial papers (CPs), certificates of deposits (CDs) and commercial bills (CBs).
- Treasury bills are short-term instruments issued by the Reserve Bank on behalf of the government to tide over short-term liquidity shortfalls. There are three categories of T-bills: on tap bills, adhoc bills, and auctioned T-bills.
- A commercial paper is an unsecured short-term promissory note, negotiable and transferable by endorsement and delivery with a fixed maturity period.
- Commercial bill is a short-term, negotiable, and self-liquidating instrument with low risk. In India, the bill market did not develop due to (i) the cash-credit system of credit delivery where the responsibility of cash management rests with banks and (ii) an absence of an active secondary market.
- Certificates of Deposit are unsecured, negotiable, short-term instruments in bearer form, issued by commercial banks and development financial institutions.

- Call/notice money market is a market for very short-term funds repayable on demand and with a maturity period varying between one day to a fortnight.



15.8 FURTHER READING

- Bhole, L.M. & Mahakund, J. (2009). *Financial Institutions and Markets*. New York: The McGraw-Hill.
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15.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q.No.1: Money market refers to the institutional arrangements facilitating borrowing and lending of short-term funds. In a money market , funds may be borrowed for periods varying from a maturity period of one year or less, against different types of instruments such as bills of exchange, short-term securities, banker's acceptances, etc. called 'near money'. The money market provides funds to finance production and distribution. It helps promote economic growth of the country.

Ans to Q.No. 2: The instruments traded in the Indian money market are treasury bills (T-bills), call/notice money market - call (overnight) and short notice(upto 14 days), commercial papers (CPs), certificates of deposits (CDs), and commercial bills (CBs).

Ans to Q.No. 3: A demand bill is payable immediately 'at sight' or 'on presentment' to the drawee. A bill in which the time for payment is specified is considered to be as demand bill. On the other head, usance bill is payable at a specified later date. The term 'usance' refers to the time period recognised by custom or usage for the payment of bills.

Ans to Q.No. 4: The financial instrument which is traded in the bill market is a bill of exchange. It is used for financing a transaction in goods that

takes some time to complete. It shows the liability to make payment on a fixed date when goods are bought on credit. The commercial bills has a high degree of liquidity and are riskless.



15.10 MODEL QUESTIONS

Find the correct answer:

Q 1: The market for a very short period loan is called:

a) money market

b) collateral loan market

c) call money market

d) bill market.

Q 2: The correct feature of the Indian Money market is:

a) unorganized

b) well-established

c) developed

d) dichotomized into unorganized and organized sectors.

Short Questions (Answer each question in about 150 words)

Q 1: Why is the commercial bill market not developed in India?

Q 2: Write short notes on-

a) Certificate of deposits

b) Commercial paper

c) Treasury bills.

Q 3: Explain the various types of Treasury bills.

Essay- type Questions (Answer each question in about 300-500 words)

Q 1: Define money market. Explain its various instruments.

Q 2: Distinguish between the money market and the capital market.

Q 3: Explain the interdependence of the money market and the capital market.

Q 4: Explain the role of money market in economy.

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