

MONETARY ECONOMICS

M.A . Economics

Semester-II, Paper-II



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Lesson - 1

DEFINITION OF MONEY - FUNCTIONS AND NEAR MONEY

After reading this lesson, you will be able to understand the following topics.

Definition and Functions of Money

Quantity and Types of Money

Characteristics of Good Money

Importance and Limitations of Money

Monetary Economic System, Structure, Characteristics

Measures of Money Supply in India

Lesson Structure

1.1 Introduction

1.2 Difficulties or Limitations of Barter System

1.3 Money - Definition

1.4 Money - Functions

1.5 Evolution of Money - Types of Money

1.6 Money - Near Money

1.7 Characteristics of Good Money

1.8 Theoretical Arguments and Objectives on the Definition of Money

1.9 Importance of Money

1.10 Limitations of Money

1.11 Structure and Characteristics of Monetary Economy

1.12 Measures of Money Supply in India

1.13 Key Terms

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1.15 Self-Assessment Questions

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1.1. Introduction:

In the beginning of human existence on Earth, human needs were limited. In other words, they only had basic needs. They used to produce or create all the goods and services they needed themselves. They lived a simple life with self-sufficiency. It was difficult for every person to produce all the goods required for their consumption. This is because their intelligence and skills were not sufficient to produce all the goods they needed. An individual could only produce a few goods well, according to their skill and ability. In this way, specialization and division of labor began in human life. With this, an individual began to give a large part of what they produced (goods) to others and take other goods they needed from them. This is called the Barter System.

This system, where an individual gives goods they possess to others and receives goods they do not have from them, is called the barter system. That is, direct exchange of goods for goods is described as the barter system in economics. Here, "goods" should be understood as both physical goods and intangible goods (services). This barter system was in practice in various countries around the world for a long time. Even today, this system is still in practice to some extent in some parts of the African continent and in rural areas of India. However, this system faces many difficulties and hardships in practice. As civilization grows in society, this system encounters many complications and complex problems. Let's discuss some of the major problems generally encountered in the barter system.

1.2. Difficulties or Limitations of the Barter System:

As long as human desires, the number of goods, and their quantity were small, the barter system worked well. As people's desires, tastes, and civilization changed, and the scope and diversity of goods increased, the limitations of this system became fully evident.

They are:

a. In this system, there is no common unit of measure for valuing goods and services or determining prices. Due to the lack of a common unit, it is not enough to express the value of each good in terms of some other good. Its value must be expressed in terms of all other goods. If any one good changes, the values of all goods must be changed. This is a very laborious task. Therefore, this system works in primitive economies where the quantity and number of goods are small, but it does not work in modern economies where the number of goods is large. Since every good has many types of standards, it is difficult to measure the value of goods if there is no common measure of value. As a result, in barter, some gain while others lose. In a system where there are many uneducated people, this system creates many problems and complications.

b. For exchange of goods to occur in this system, there must be a double coincidence of wants between the two parties. That is, in this system, it is not enough for the person wanting to sell a good to find a person wanting to buy it. The latter person must also possess the good that the former wants. Otherwise, a transaction cannot take place between them. For example, let's say one person has jowar (sorghum) and wants milk. Another person has milk but wants rice. Since there is no coincidence of wants between them, a business transaction cannot

occur. For a transaction to occur between them, a third person is needed. This third person must have rice and also need jowar. Only when such a person is found can a transaction take place between them. In such circumstances, trade is limited and sluggish, making it impossible to achieve economic development.

c. For this system to work, there must be a possibility of dividing goods. Otherwise, trade will not occur. For example, one person has a cow, and another person has cloth. The value of a cow is more than the value of a small amount of cloth needed by one person. A cow cannot be divided, so trade is not possible. Moreover, if a cow is divided, its value will be completely destroyed.

d. In this system, it is not possible to save wealth for the future. Most goods cannot be stored. For example, if a person stores wealth in the form of sheep for the future, and they get sick and die, that person will lose everything. In some cases, goods lose their quality and value. Furthermore, saving for the future in the form of goods requires spending money to store them.

e. In this system, lending and borrowing are also difficult. Loans are given in the form of goods. They must be repaid in the form of goods. There are some difficulties here. The same good that was given as a loan must be returned. This may not be possible. Even if the same good can be returned, its value may decrease. For example, let's assume a person borrowed a cow from another person. If, after 5 years, the loan has to be repaid in the form of the same cow, the cow would have become barren, old, and lost its value. In this case, the lender suffers a greater loss. When the value of barter changes, either the lender or the borrower is bound to lose.

Due to these reasons, although the barter system worked satisfactorily in the beginning, it became completely useless as the population, the number and quantity of goods, and geographical activities increased. These difficulties, complications, and problems in this system led to the search for and invention of money.

1.3. Money - Definition of Money:

Due to the severe shortcomings in the barter system, human society felt the need to find an efficient alternative method. Money was initially introduced as a measure. This allowed the value of various goods to be known in terms of a common unit. After some time, money began to be used as a medium of exchange. The introduction of money not only eliminated the shortcomings of the barter system but also created opportunities for technological development, specialization, introduction of division of labor, and expansion of the volume and scope of production and trade. The buying and selling of goods (markets) expanded to an international level. Capital accumulation became possible. Regardless of who, when, or for what purpose money was invented, money has today contributed to the welfare and progress of humanity. That is why Crowther, an economist, says about money: "Money is one of the most important human inventions. Every science has an important invention. In mechanics, it is the wheel, in science, it is the lever, in political science, it is the vote, similarly in economics, in human social life, money is an important invention."

It is not precisely known when money originated. However, it did not originate in the early stages of human civilization. Money came into use after human existence continued for thousands of years and after the difficulties of the barter system became severe. Defining money is very difficult. Since money performs many functions, it is very difficult, if not

impossible, to incorporate all of them into a single definition. Therefore, many economists have defined money in various ways. Let's now examine some important definitions.

1. F.A. Walker defines money as: "Money is what money does." This definition is based on the functions of money. Although it does not directly mention the functions of money, it indirectly conveys them.
2. D.H. Robertson defined money as "Anything which is widely accepted in payment for goods, and in discharge of other kinds of business obligations." This definition states that money acts as a medium of exchange. This definition does not mention other functions of money.
3. "Anything that is generally acceptable as a means of exchange and which at the same time acts as measure and store of value." In this definition, only three of the four main functions of money are recognized. Money also acts as a standard of deferred payments. This function is overlooked in this definition.

Characteristics of Money:

Anything that has universal purchasing power can be called money. The main characteristic of money is liquidity. Liquidity means the characteristic of being easily convertible into various goods and services without delay or loss. Anything considered money must primarily have three characteristics: (1) complete liquidity, (2) quick maturity without time delay, and (3) general acceptability as a medium of exchange. These three characteristics are interdependent. The importance of liquidity and maturity characteristics arises only when it is not cash.

1.4. Functions of Money:

Money has mainly four functions. They are: 1. Medium of Exchange 2. Measure of Value 3. Store of Value 4. Standard of Deferred Payments. Of these, the first two are primary functions, and the remaining two are secondary functions.

Primary Functions:

1. Medium of Exchange:

This is the most important of the functions of money. Money, by acting as a medium or instrument of exchange, helps to overcome the difficulties present in the barter system. The coincidence of wants is not necessary in a monetary economy. All goods coming to the market are first converted into money. That is, goods and services are sold for money. Then that money can be converted into the desired goods. That is, necessary goods can be bought with money. For example, a person who has a cow does not need to search for a person who has a horse and needs a cow. They can sell their cow for money and buy a horse with that money. Since everyone desires money, there is a coincidence of wants among everyone. Moreover, since money also has very small units, division is also convenient as a medium of exchange. Any good can be bought with money, anytime, anywhere. Therefore, there is also time coordination. Due to this, business transactions happen quickly, and the scope of business also increases.

2. Measure of Value:

The second important function of money is to act as a measure. Money is used to measure the value of goods and services. It is natural to express the value of goods with what acts as a medium of exchange. Business agreements and business accounts are also expressed in

monetary terms. Money is like a measuring stick with which the values of goods can be compared. The mechanism of prices was formed because money acted as a measure of value. When compared to the market prices of various goods, their relative values are easily known.

This second function performed by money is a result of its first function. Whenever money is used for the exchange of goods, the value of those goods must also be expressed in money. When the value of a good is expressed in monetary terms, it is called "price." With the help of price, it is also possible to know the value of production, national income, and per capita income of the people.

a) Store of Value: Since money is used as a medium of exchange in business transactions, it is kept as a store for future needs. That is, money also acts as a store of value. Since money can be kept for any length of time, every person saves a part of their income for future needs. Business organizations also keep money as a necessity for daily expenses. People also save some money for illness and unforeseen needs. However, even though money does not have the characteristic of perishing, when used as a store of value, it sometimes benefits some people and causes loss to others, depending on price fluctuations and changes in interest rates paid by banks. Overall, money is very useful for storing some wealth for future needs, a convenience not available in the barter system.

b. Standard of Deferred Payments:

Money is useful not only for measuring the value of goods but also for calculating and giving loans. A loan is an amount taken on the promise of repayment in the future. Such a loan is expressed in monetary terms. Just as barter was difficult when there was no money, so too was giving and taking loans equally difficult. Money has made giving and taking loans much easier. Business transactions and dealings are progressing rapidly. It has created opportunities for the formation of a capital market in every country.

Briefly, the functions of money can be stated in the following two lines. Money is a matter of four functions: "a medium, a measure, a standard, and a store." For money to act as a medium of exchange and a measure of value, it must gain universal acceptance. The value of money must be stable for the people of the country to use it as a store of value and a standard of future payments. That is, the value of money should not change frequently. However, it is important to remember that all the functions of money do not work separately. All functions are interrelated. Nowadays, money also acts as a means of transferring value. (As a means of Transferring Value). A person can sell their fixed and movable assets in one place and buy them in another place with that money. In this way, value can be transferred from one place to another through money, which is the opinion of the economist Kinely.

1.5 Evolution and Kinds of Money:

Commodity Money: The shortcomings of the barter system led to the creation of money. This made people's economic lives easier. The money we use today has evolved through many stages in human history. In the beginning of human civilization, many substances and goods were used as money with the acceptance of all people. Rice, wheat, tobacco, cattle, etc., were used as money. Shells were used as money in coastal areas, and furs and horns were used in cold countries. In tropical countries, elephant tusks, tiger teeth, and other materials were used as money. Over time, various types of money came into circulation or use. All the above mentioned are referred to as Commodity Money. Metal money and paper money also came into circulation later.

Macro Economics

1.6 Definition and Functions of Money

Metallic Money: The defects and difficulties of commodity money led to metallic money. Metals like iron, copper, and bronze all had the opportunity to act as liquid assets. Eventually, precious metals like gold and silver were used as monetary commodities. Apart from having value, these metals also had good demand for purposes like ornaments. Since their supply was relatively low, their value was high. Therefore, they were chosen as monetary commodities. They could be easily transported from one place to another, providing great convenience as a medium of exchange. No matter how small the units these metals were divided into, their value remained stable. Their value generally did not decrease over time. They could be stored for any length of time. Although platinum is a metal, it is more valuable and rarer than gold and silver, so it was not used as a monetary commodity. If it were used, it would have to be in very small quantities, which would be difficult, so it was not used as a monetary commodity. Metals like iron were available in large quantities, so their value was low. Even for very small transactions, a large quantity of it would have to be used. This was also problematic. Among gold and silver, silver, though less valuable, was in use as a monetary commodity for a longer time. The reason for this was the higher value of gold. Moreover, gold was not suitable for very small transactions. After some time, along with gold, silver, copper, or bronze metals specifically for small transactions came into use.

There are two phases in metallic money. In the first phase, pieces of metal were used as money. When these changed hands, i.e., when they were in circulation, they had to be examined every time. Although it was not difficult to ascertain the quality and weight of the metal, their use was inconvenient. In the second phase, with the introduction of coins, all difficulties were removed. Coins were issued with government stamps and marks. Since there was a government guarantee regarding their weight and quality, it was enough to count them. There was no need to examine them. Since metal is also a commodity, metallic money is also considered commodity money.

Paper Money: The next stage in the evolution of money is paper money. The difficulties with metallic money led to the introduction of paper money. While small business transactions could be done with coins, large transactions were difficult. Moreover, carrying valuable metals like gold and silver from one place to another was risky. To overcome all these difficulties, paper money was introduced. Initially, businesses used documents proving their metallic money as currency instead of the metal itself. After some time, these documents were recognized as money. At this stage, the government took control of these documents. Subsequently, paper money was issued by the government.

There are two phases in government paper money. In the first phase, paper money was only an alternative to metallic money. Legally, paper money was convertible into metallic money. That is why paper money was issued with the following promise: "On demand I promise to pay the bearer the sum of." It was issued with the signature of the issuing government official. In the second phase, paper money lost its convertibility. Now, in all countries, only the promise on this monetary document remains. Currently, most of the legal tender in circulation is in the form of currency notes issued by the central bank.

Currently, in all countries, M1 is referred to as money. M1 = Currency, coins, and bank demand deposits. Money does not have a specific form these days. At an international level, SDR (Special Drawing Rights) are used as money. It does not have a specific form.

- Common Money
 - Coins

- Full bodied (Metal value equals face value)
 - Token (Face value is greater than metal value)
 - Currency Notes
 - Representative Paper Notes
 - Fiat Money
 - Bank Money
 - Cheques
 - Drafts
1. Common Money: Common money is also called government money. Since it is issued by the government, it is also called Legal Tender Money. It is also referred to as Standard Money.
 2. Nowadays, many business transactions are conducted with the help of cheques and drafts. Those who deposit money in banks issue cheques against their deposits. This is considered bank money. Similarly, drafts are also taken against deposits to send money to other regions. A lot of business also happens through these. Like money, cheques and drafts must be accepted in business transactions. Therefore, they are also called Near Money. A careful examination of the above table will help understand the different types of money.

1.6 Money and Near Money

Money in circulation includes (1) Legal tender money, e.g., Coins and Currency notes, and (2) Bank money or money that can be withdrawn in the form of cheques and drafts. This is called Bank Money or Credit Money. These cheques and drafts are not money themselves, but they perform the functions of money. Legal tender money has perfect liquidity.

It is an asset with which anything can be bought at any time. In modern economic systems, with the significant increase in the volume of business, legal tender money is inconvenient for handling large transactions. To overcome this difficulty, many alternatives to money have been discovered. For example, bank money is used to buy a house or a car. Since businessmen use bank money extensively in their business activities, bank money constitutes a large portion of the total money in supply. Now, all components of money contain money.

Besides money, there are some assets that have high liquidity. Although they do not have as much liquidity as money, they possess significant liquidity. These types of assets are called 'Near Money'. Examples include bills of exchange, treasury bills, debentures, savings certificates, etc. All of these have a market. They can be converted into money at any time as needed. It does not take much time or effort to convert them into money. Near money is not directly used much for the purchase of goods and services. However, by quickly converting them into money, business transactions can be facilitated. All the above-mentioned are referred to as alternatives to money, near money, and liquid assets.

(a) Bill of Exchange: These types of bills function as good near money. It is a promise to pay a certain amount at a specific time in the near future. Generally, the duration of such bills is three months or 90 days. These bills are involved only in reliable business transactions. These financial bills arise when one person lends to another. One such financial bill is a treasury bill. The government borrows by issuing promissory notes for its short-term needs. These are called treasury bills. The person holding the bill can obtain money by discounting it.

Bond: This is another important near money. The government uses this instrument for its long-term borrowing needs. This is also a promissory note. It specifies the long-term loan taken by the government, the number of years, the number of installments, the interest rate, and when the principal amount will be repaid. This method is followed by industrial and business organizations as well as the government.

Bonds issued by business organizations to individuals and the government are called 'debentures'. In some cases, a company sells bonds stating how much interest it will pay without mentioning when it will repay the loan. These bonds and debentures can be easily sold for money in the market. Hence, they are considered near money.

'Equity shares' of industrial and commercial organizations are also listed as 'near money assets'. There is no promise to those who buy shares that a specific net amount will be paid. However, the companies that sell shares grant them the right to demand a share in the profits of the organization. "Equity shares" can be sold at any time in the stock exchange market. However, some loss may have to be borne. These are not 'liquid' assets.

Another thing we need to understand here is that 'near money assets' are not real money. They are claims to money. A person holding a near money asset, for example, a bill of exchange, can convert it into money and buy any commodity. Therefore, it is said that "All components of money are liquid but all liquid assets are not money."

Qualities of Good Money:

1. The value of money in the country should be stable or constant. Its value should not change frequently. If the value of money changes frequently, economic fluctuations and instability will arise, harming development. People will face difficulties. Therefore, a good quality of money is Stability of Value.
2. The monetary commodity must be universally accepted. Otherwise, it will not have the opportunity to circulate as money. Whether it is metal, paper, or any other commodity, if it cannot gain public acceptance, it is impossible for it to continue as money. Therefore, a good quality of money is General Acceptability.
3. **Durability:** The monetary commodity must be durable. Many commodities that were previously used as money are no longer used as money. The reason for this is their lack of durability. Metallic money has complete durability. Although paper money may not last long, new notes can be issued at a low cost in place of old notes, so paper money can be said to have durability.
4. **Portability:** Money in circulation changes hands and also changes places. Therefore, the commodity acting as money should be suitable for this. This characteristic has only been partially present in monetary commodities used so far. Paper money has this characteristic completely. That is why paper money is widely used in all countries these days. Bank money also has this characteristic completely.
5. **Divisibility:** The commodity acting as money should be suitable for division. Otherwise, small business transactions would be difficult. Due to the complete lack of this characteristic in commodities used in the past, metallic money and paper money were introduced in their place. Therefore, to be considered a good monetary commodity, the commodity must be divisible.

6. Homogeneity: Money should be easily recognizable at a glance. That is, all units of the monetary commodity should be identical. For example, the hundred-rupee notes used in our country circulate with the same color, size, and details. There are no differences among them. If there is a difference, it is identified as a counterfeit note and removed from circulation. This is called homogeneity. This characteristic is present only in metallic and paper money.
7. Elasticity: Monetary needs change based on the level of business transactions in the country and changes in population. The money supply should change in accordance with these changes. That is, when business transactions are at a high level and population growth is high, more money is needed. Similarly, when business transactions decrease and population growth slows down, the need for money is not high. At that time, the money supply should be reduced. This increase and decrease in money supply according to circumstances is called Monetary Elasticity. Only paper money has all the above-mentioned characteristics. That is why paper money is widely used in all countries these days.

1.10 Theoretical Debate on the Definition of Money:

Recently, a debate has emerged about what constitutes money and what does not. This entire debate is based on the functions of money. According to the survey "Monetary Theory and Policy" conducted recently by Prof. Harry G. Johnson, the definition of money is based on: 1. Conventional Approach 2. Chicago Approach 3. Gurley and Shaw Approach 4. Credit Approach.

1. Conventional Approach: Some economists defined money based on one of its functions: money as a medium of exchange. They included currency notes and demand deposits in money. Since money as a medium of exchange was considered the most important function in their view, they included only these two (currency notes and demand deposits) in money. Both of these have perfect liquidity.
According to the argument of this class of economists, total money supply = Currency + Demand Deposits (Money Stock = Cash + Demand Deposits). This is called 'M1'. Those who made this argument did not include near-money components in the money supply. Their opinion was that converting these into money would incur some cost, and they considered them frozen assets. They believed that these would have to be sold at a very low price.
2. Chicago Approach: Prof. Milton Friedman is considered the leader among those who expressed this view. They do not agree with the argument that money acts only as a medium of exchange. In their view, money is demanded not only as a medium of exchange but also as a store of value. Keynes also used the term "Money to hold". When money is demanded not only as a medium of exchange but also as a store of value, their argument is that near money should also be included in money. Therefore, their intention is to include time deposits in money. According to this view, $M2 = M1 + \text{Time Deposits}$, i.e., $M2 = \text{Currency} + \text{Demand Deposits} + \text{Time Deposits}$. Their research has shown that there is a close relationship between monetary income and money supply. Changes in money supply bring about changes in monetary income. Such a relationship exists between these two. If time deposits, which are fixed-term deposits, are also included in the money supply, the change in monetary income due to changes in money supply becomes even clearer.
3. Gurley and Shaw Approach: They based their argument on the velocity of money in circulation and the consequences arising from it. Furthermore, they considered liquid

'near money instruments' used as alternatives to money, such as short-term government securities, time deposits, and post office savings bank deposits, as part of the money supply.

According to both of them, when referring to money supply, it should be determined by combining currency, demand deposits, time deposits, and the liabilities of non-bank financial institutions, taking into account their level of substitutability for money.

4. Credit Approach: Those who advocated this argument can broadly be divided into two categories: (1) Federal Reserve System of U.S.A. and (2) R.S. Sayers and the Radcliffe Committee. The financial experts of the American Federal Reserve System (Central Bank of U.S.A.) stated that credit money (Money created by Commercial banks) is an alternative to currency. In their view, credit instruments like cheques and deposits are very close substitutes for money.

The second group suggests replacing the concept of money with general liquidity in the economy. In their view, money supply and its velocity are not as important to the economy because money can be substituted with credit without any limitation. A credit card helps the person holding it to buy all the goods they need. Their argument is that money supply is not the main cause of monetary actions. Their belief is that the country's economic affairs depend not only on money supply but also on the overall liquidity in the country. There is no consistency among these arguments.

1.9 Significance of Money:

In a modern economic system, money holds a crucial position and plays an important role. Everyone uses money in their daily business transactions. Business accounts, values of goods and services, all are in monetary form. Recently, with every economic activity being conducted with the help of money, money has become an important instrument for economic development. Barter in modern economic systems occurs entirely with the help of money. Money can measure a person's desire for a commodity and the utility they derive when they obtain it. It greatly contributes to the growth of national wealth and the increase in people's social welfare. Money is very useful for the rapid industrialization of countries and for the smooth functioning of the economic system.

As Prof. Robertson stated, the existence of a monetary economy greatly helps people in society with questions like: What do they need? How much do they need? What should be produced? How much should be produced? And how to best utilize limited productive capacity. Some points highlighting the importance of money are briefly mentioned below.

- a. Debt Settlements: In a modern economic system, debt settlements are done with the help of money. All the previous difficulties have been removed with the introduction of money, and taking and repaying loans have become very easy.
- b. Income: All incomes are now in monetary form. Workers' wages, business profits, all are in monetary form.
- c. Wealth: In the barter system, people stored their wealth in the form of goods. They suffered losses when goods were destroyed or stolen. Storing was a problem. With the discovery of money, a good opportunity arose to store wealth for future needs. Nowadays, everyone stores a part of their wealth in monetary form.
- d. Consumption: Money has provided great convenience to consumers. Since money has purchasing power, consumers can buy goods and services in the quantity they

need and at the time they need them. Money has removed the difficulties faced by consumers in the barter system.

- e. **Production:** Money has enabled the introduction of specialization or division of labor in production, allowing for large-scale production. The price of various factors of production can be easily paid in money. Since money serves as a measure of value for goods, business transactions proceed smoothly and efficiently.
- f. **Public Finance:** Modern states are not police states as they were in the past. Governments play an active role in the economy. Without money, governments would not have the opportunity to implement plans or undertake development programs. Money is very useful for managing government expenditure, taxation, debt management, deficit financing, and other economic affairs.

Capitalist Economic System - Role of Money: The main objective of a capitalist economic system is to maximize profit. The main features of this system are competition, private property, hereditary rights over it, economic freedom, and complete consumer freedom. In this system, there is no government intervention in economic affairs. The market mechanism has greater importance. Prices are determined by the forces of supply and demand for goods. This means the value of goods and services is measured in money. Sales and purchases are made with money. All incomes are in monetary form. Factors of production are paid in money. In this way, money holds a crucial position in a capitalist economic system.

Socialist Economic System - Role of Money: In a socialist economic system, all means of production are under government ownership. Production occurs for the welfare of the people, not for profit. All economic development is planned. The government takes on the responsibility of providing food, clothing, and shelter necessary for people to live. Money is used to implement plans. Similarly, the government spends crores of money for the implementation of public welfare programs. Moreover, the government extensively uses money to provide financial assistance to the public through transfer payments, unemployment benefits, old-age pensions, etc. In this way, money plays a significant role in the socialist economic system for the country's economic development and public welfare.

As an economist said, "Money plays the role of a master in a capitalist economic system and a servant in a socialist economic system." Both roles are important in both economic systems. Therefore, money plays a very important role in both these economic systems.

Mixed Economic System: Money also plays a very special role in mixed economic systems like India. In the private sector, money plays a significant role in determining employee levels and increasing production and income. In the public sector, money plays a key role in the allocation of resources and the distribution of income and wealth. Money effectively plays its role in important programs like capital accumulation, economic development, implementation of plans, and management of public welfare programs. Therefore, as Sayers said, modern economic systems are intertwined and dependent around the central point of money. There is no exception to any type of economic system here.

1.10 Defects of Money:

We have learned about the importance of money and its prominence in modern systems, recognizing it as a unique human invention. It is an undeniable fact that all the trade and business developments we see in the world today are due to money. However, due to some defects in money and its role, some problems also arise. Some of these defects are mentioned here.

a) **Instability of Value:** The value of money is not stable in all circumstances. In some cases, the value of money decreases. Then, the prices of goods and services increase, leading to 'inflation'. In some cases, the value of money increases. Prices (of goods and services) decrease, resulting in 'deflation'. These developments destabilize the economy and hinder the development process. In this way, due to changes in the value of money, the government and the people face difficulties in various situations.

b) **Economic Inequalities:** Since money acts as a store of value, the rich and wealthy accumulate large amounts of money. Because there is an opportunity to save, they earn more, invest more, and have the opportunity to become even wealthier. Those with lower incomes cannot save or accumulate. Therefore, their economic situation does not improve, leading to income inequalities between the rich and poor classes.

(c) **Vices of Money:** Many social vices and economic crimes currently present in society are attributed to money. Money causes people to engage in drinking, prostitution, bribery, theft, and other immoral acts and bad habits. Therefore, money must be used with extreme caution. If there is no surveillance, control, or regulation over money, it can lead to many dangerous situations.

That is why it is said, "Money is a good servant, but a bad master." Money should be used as a good servant.

1.11 Nature and Features of Monetary Economy:

In a monetary economy, money is used extensively and freely. Money circulates as a medium of exchange. All modern economic systems are monetary economies. Therefore, in these systems, goods are bought with money. In other words, in monetary economies, goods are converted into money, and money into goods.

Paper money and coins are in circulation. Bank cheques and drafts are also used. Coins are mostly used for small transactions, and currency for large transactions. All transactions take place in money. Accounts related to businesses and other transactions are written in money. The value of all goods is expressed in prices, so there is a price mechanism in the economy.

A monetary economy does not have the defects of the barter system. Production of goods is high, and there is also product diversification. Producers receive sufficient encouragement to invent new products and introduce them to the market. The development process also proceeds very rapidly.

Money is a very valuable social resource in modern economic systems. It is the source of all wealth. People work for money. With the purchasing power they gain, they buy and consume various goods and services, deriving utility and pleasure. With the help of money, they can also measure that utility.

Another important feature of a monetary economy is the presence of a banking system. Commercial banks collect deposits from individuals and organizations and create credit. In the economic system, money, along with near money, holds an appropriate place. There is also a central bank to control and supervise all monetary transactions. The role of the central bank is crucial in stabilizing prices, achieving full employment, and promoting economic development. In monetary economies, the volume of production, the diversity of goods, production methods, prices of goods and services, the distribution of national income among various groups, and all other factors are influenced by money. The main reason for modern economic systems to achieve development in all sectors is that they are monetary economies.

Money Veil: According to traditional economists, money has no particular importance or significant role. It does not have the power to influence the economy on its own. Money must adapt to economic activities, but economic activities do not adapt to money. Money only helps overcome the defects of the barter system, but it does not dictate or influence the functioning of the economy. Therefore, the traditional economists' view is that money is barren and ineffective. Money acts like oil that helps a machine work without friction. This ensures smooth production, distribution, and consumption. The economist Pigou says, "Money is the garment draped round the body of Economic life." Money only changes the method of exchange. When there are no economic activities, there is no money. But even without money, economic activities would still exist. From this perspective, the traditional economists' view is that money is just a veil.

Money facilitates smooth exchange. However, it cannot determine the level of economic activity. Money helps consumers obtain goods and services, but it does not determine their consumption volume. Although money is an important instrument in exchange, people do not truly desire money itself, but the goods that can be bought with money.

That is why the classical economist J.B. Say said, "Supply creates its own demand." When a producer produces a good, he creates a demand for other goods. He buys them with his own goods. This does not lead to overproduction or unemployment. In the view of classical economists, monetary difficulties are very rare. If any such difficulty arises, it will resolve itself.

In this context, we should not forget one thing: classical economists analyzed with a long-term perspective and the assumption of full employment. In their view, in the long run, supply automatically equals its demand. Therefore, they analyzed the functioning of the economy with the barter system in mind. The economic depression of 1930 and the subsequent developments proved the classical theory to be flawed. However, current economic systems operate based on money.

1.12 Money Stock or Supply Measures in India:

In the eyes of the common man, money means the coins and currency notes printed by the central bank and the government. This is called legal tender money. Due to many transformative or qualitative changes in the banking system and financial sectors, and the implementation of many institutional changes and reforms, today, besides coins and notes, many other alternatives to money have emerged worldwide. Based on the level of liquidity and how money acts as a store of value, there are many money supply measures today. In India, the following five practical measures are officially announced:

1. Money with the public = Notes issued + Coins - Cash with banks
2. $M1 = \text{Currency with the public} + \text{Other deposits with the Reserve Bank} + \text{Demand deposits with banks}$

M1 is called the narrow money measure. Generally, in India, money refers to M1.

3. $M2 = M1 + \text{Post office Savings Deposits}$
4. $M3 = M1 + \text{Time Deposits with banks.}$

M3 is called the wider measure. In our country, where there is a large rural population, people save their money in post offices. These also have security and liquidity like commercial banks in urban areas. To account for these, M2 and M4 measures have been introduced.

5. $M4 = M3 + \text{Total Post Office Deposits}$. The five measures listed above are presented in descending order of their liquidity. Currency and M1 have very high liquidity. M4 has very low liquidity.

Keywords:

1. Money proper: Money used for monetary transactions is called money proper. It is used for buying and selling goods, lending, and repaying loans. It is always in circulation. It exists as paper money and coins.
2. Barter system: A system where an individual exchanges the goods they produce with others to obtain the goods they need from them. This happens directly. It is also called the commodity exchange system.
3. Bank Money: A facility provided by commercial banks to individuals and organizations who deposit money in the bank in the form of cheques and demand drafts to facilitate their business transactions. This is also called near money.
4. Commodity Money: When any commodity circulates as money, it is called 'commodity money'. In the initial stages, many countries used various commodities as money. In reality, at that time, only commodity money existed.
5. Token Money: These are coins made of a lower type of metal. They also circulate as money. Their face value is higher than the intrinsic value of the metals in them. They are called Limited Legal Tender Money.
6. Near Money: All instruments used as alternatives to money are called near money. For example, bills of exchange, treasury bills, government bonds, savings certificates, etc. These can be easily converted into money when needed.

1.13 Conclusion:

This section on "Definition and Functions of Money, and Near Money Components" explains the difficulties in the commodity exchange or barter system, how humans invented money as a result, and the process of money's evolution. Subsequently, various definitions given to money are described.

Macro Economics

1.16 Money Definition - Functions...

Definitions and functions of money have been examined. Types of money and characteristics of a good monetary asset have also been mentioned. The importance of money in modern economic systems and the role it plays have also been explained. Different opinions and arguments that arose regarding the definition of money have also been discussed. The shortcomings of money and the economic problems that arise if money is not used correctly have also been explained. The form and characteristics of a monetary economy, and the concept of "money veil" have also been explained in this chapter. Finally, the measures of money supply in India have also been discussed.

1.14. Self-Review Questions:

1. "Money is what performs monetary functions." Elaborate on the functions of money.
2. Define money and explain the difference between money and near money.
3. In a modern economic system, the concept of 'money' has replaced the concept of 'near money'. Discuss.
4. a. Explain the nature and characteristics of a monetary economy.
b. (Money Veil).

c. Measures of money supply in India.

1.15. Books to Read:

1. G. Crowther - An Outline of Money
2. E. Shapiro - Macro Economics
3. F.R. Glabe - Macro Economics
4. D.H. Robertson - Money
5. A.C.L. Day - Outline of Monetary Economics.

Lesson - 2

MONEY STOCK MEASURES - MONEY MULTIPLIER

2.0 Objectives and Goals

2.1 Introduction

2.2 Money Stock Measures

2.3 Importance of Money Stock Measures

2.4 High-Powered Money

2.5 Factors Determining Money Supply

2.5.1 Factors Affecting High-Powered Money

2.5.2 Factors Affecting Money Multiplier

2.6 Money Multiplier

2.6.1 Money Multiplier Process

2.6.2 Derivation of Money Multiplier

2.6.3 Narrow Money Multiplier

2.6.4 Broad Money Multiplier

2.6.5 Factors Affecting Money Multiplier

2.6.6 Critique of Money Multiplier

2.7 Money Multipliers in India

2.8 Summary

2.9 Points to Remember

2.10 Key Terms

2.11 Self-Review Questions

2.12 Books to Read

2.0 Objectives and Goals:

We studied the functions of money in the previous section. In this section, we are going to learn about money stock and factors related to changes in money stock. By the end of this lesson, you will understand the following topics:

1. Money Stock Measures
2. Importance of Money Stock Measures
3. Narrow Money, Broad Money

Macroeconomics

4. High-Powered Money
5. Factors Affecting Money
6. Factors Affecting Multiplier
7. Money Multiplier Values in India

2.1 Introduction

Money is a human creation to overcome the shortcomings of the barter system. In the previous section, we learned about the various functions of money such as a measure of value, medium of exchange, measure of future payments, store of value, and other functions. In this section, money stock measures and the factors they depend on have been explained. High-powered money and money multipliers, which influence money supply, have also been discussed. Now let's learn about money stock measures.

2.2 Money Stock Measures

The search for measuring money stock has been ongoing since the beginning. Theories based on business transactions considered "money for conducting business transactions" as the quantity of money. Theories based on assets considered various financial assets such as bonds, shares, etc., as money. That is, money that performs both the functions of "medium of exchange" and "store of value" is considered the quantity of money.

If money and other assets are considered money, many factors come to mind. Currency and demand deposits have high liquidity and also function as a medium of exchange. Time deposits and government deposits, while liquid, incur some cost to convert into a medium of exchange. Real estate and automobiles are low in liquidity, and conversion takes a short time and high cost. In this way, many items fall into the money category. Therefore, the distinction between money and other assets has been abandoned.

Today, the method of measuring money supply is implemented by central banks. Central banks generally classify money supply based on the characteristics of monetary assets or on institutional differences between banks and other financial institutions. Now let's examine the measures used to determine the quantity of money stock in some countries. In America, four aggregate monetary aggregates, namely M1, M2, M3, L, are considered, while in Britain, there are six aggregates from M0 to M5. A higher number of M aggregates indicates more financial assets and a larger quantity. In America, the narrow money measure is M1. This money represents the exchange medium characteristic of money. This money can be expressed as follows:

$M1 = \text{Currency with the public} + \text{Demand Deposits} + \text{Other checkable deposits},$

Now ATS (Now = Negotiable Order of Withdrawal, ATS = Automatic Transfer Service) + Traveler's Checks

The second type of measure for money stock can be expressed as follows:

$M2 = M1 + \text{Savings Deposits} + \text{Small Denominations Time Deposits}$

Macroeconomics

2.3 + Money Market Mutual Funds + Overnight Purchase Agreements + Eurodollars issued to US residents overnight

In broad money measures, monetary funds are referred to as M3 and L.

$M3 = M2 + \text{Large Denominations Time Deposits} + \text{Term Repurchase Liabilities}$

$L = M3 + \text{Non-bank savings bonds of US residents} + \text{US residents' term Eurodollars} + \text{Short-term Treasury Securities} + \text{Commercial Paper} + \text{Bankers' Acceptances}$

Money Stock Measures - Money Multiplier

These various measures indicate the modernity of the American monetary system. However, the monetary system of developing countries is simpler. Among developing countries, Malaysia's monetary system has a special characteristic compared to others. In Malaysia, money stock can be categorized into three:

$M1 = \text{Currency with the public} + \text{Demand Deposits}$

$M2 = \text{Savings Deposits} + \text{Time Deposits} + \text{Certificates of Deposit}$

$M3 = M2 + \text{Deposits in Finance Companies} + \text{Deposits in Merchant Banks} + \text{Deposits in Discount Houses}$

In the broad money measure in Malaysia, non-bank financial institutions such as finance companies, merchant banks, and discount houses have also been included.

In India, money stock measures are defined from M1 to M4.

$M1 = \text{Currency with the public} + \text{Demand Deposits} + \text{Other deposits with the Reserve Bank}$

$M2 = M1 + \text{Savings deposits in Post Office Savings Banks}$

$M3 = M1 + \text{Time Deposits}$

$M4 = M3 + \text{All deposits in the Post Office Savings system}$

The difference between M1 and M3 is only the inclusion of time deposits. Money supply M1 is referred to as narrow money supply, and M3 as broad money supply.

Macroeconomics

2.4 Importance of Money Supply Measures M1 and M3

The various measures mentioned above are called money supply measures. In India, these measures are referred to as M1, M2, M3, M4. Among them, M1 and M3 are important measures. We call M1 Narrow Money and M3 Broad Money. Many monetary economists define money supply in the narrow sense (M1). However, Friedman and other economists define money in the broad sense (M3). Based on the recommendations of the Chakravarty Committee, the Reserve Bank has also recently given preference to defining money as M3 rather than M1. Let's understand why RBI gives importance to broad money (M3).

1. If M3 is considered, the problem of dividing savings deposits into demand deposits and time deposits does not arise.
2. The Reserve Bank of India gives importance to credit budgeting in its monetary policy. To adopt this policy, it is desirable to consider not only demand deposits but also time deposits. Therefore, M3 includes both types of deposits. Hence, M3 is being

used. Now let's examine the reasons why using M1 is a more appropriate measure than M3.

1. Money is a universally accepted measure of value. Keynes and Friedman also considered money as a store of value. These two characteristics are present in the M1 measure. M3 additionally includes time deposits. These only function as a store of value and are not useful for payments. Therefore, monetary economists suggest M1 as the measure of money.
2. Generally, time deposits in banks function as a store of value. Besides these, there are also financial assets of non-bank institutions, i.e., deposits. All these are called Near Money. Their liquidity is low. Liquidity is important for money measure. Therefore, monetary economists considered M1 as the money stock measure.
3. In Credit Budgeting too, it is not possible to find money supply through M1. To estimate planned M3 and high-powered money, the growth of time deposits needs to be known. However, implementing desirable growth in bank credit through credit budgeting for M1 is a complex process. Therefore, M3 is considered the measure of money supply.
4. Time deposits are not uniform. There are differences in their maturity period or functional period. Short-term deposits are close to M1, but long-term deposits are not. Therefore, monetary economists believe that it is better to consider M1 as the money supply measure.

Due to the reasons mentioned above, monetary economists believe that it is better to take M1 as the money supply measure than M3.

2.4 High-Powered Money or Reserve Money

In the theory of money supply, high-powered money or reserve money is very important. Notes and coins with the public and deposits in banks together are called ordinary money. However, if bank reserve funds, notes, and coins are combined, it is called high-powered money. All these variables not only determine the money supply but also form the money multiplier. Let's now examine the various concepts mentioned above. Ordinary money supply can be shown in the following equation form:

$$MS = C + D \quad (1)$$

In this equation, MS = Ordinary Money Supply, C = Notes, Coins, D = Deposits. In this equation, C can be represented as follows:

$$C = Cr \cdot D \quad (2)$$

Cr is the ratio of currency to deposits. Substituting equation (2) into equation (1):

$$MS = Cr \cdot D + D$$

Rewriting the above equation:

$$MS = (Cr + 1)D$$

$$D = \frac{MS}{Cr + 1}$$

Similarly, high-powered money can be shown in the following equation:

$$H = C + R \quad (4)$$

$$R = Rr \cdot D \quad (5)$$

H = High-powered money, Rr = Ratio of reserve money to deposits. Substituting equation (5) and equation (2) into (4):

$$HS = Cr \cdot D + Rr \cdot D$$

Rewriting the above equation:

$$HS = (Cr + Rr)D \text{ or}$$

$$D = Cr + RrHS \quad (6)$$

From $D = Cr + 1MS$ and $D = Cr + RrHS$, we get:

$$Cr + 1MS = Cr + RrHS$$

Rewriting the above equation:

$$MS = Cr + RrCr + 1HS \quad (7)$$

The first part on the right side of equation (7) can be described as the money multiplier.

K means money multiplier. Cr and Rr have already been indicated.

$$Km = Cr + RrCr + 1$$

The factors determining the quantity of money supply can be broadly explained in two ways:

1. Factors affecting reserve money or high-powered money.
2. Factors affecting the money multiplier.

Now let's learn about these two types of factors.

2.5.1 Factors Affecting High-Powered Money

To identify high-powered money, the net monetary liabilities of the central bank can be taken as a basis. These can be examined from the central bank's balance sheet. These factors have been explained based on the Reserve Bank of India. We previously learned that high-powered money can be expressed as notes and coins with the public (C) and bank reserves (R).

High-Powered Money = Net Reserve Bank Credit to Government + RBI Credit to Banks + RBI Credit to Commercial Sector + Net Foreign Exchange Assets with RBI

- Cash Liabilities Payable by Government to Public (Liabilities)
- RBI's Net Non-Monetary Liabilities

The total high-powered money is estimated based on the changes in assets managed by the Reserve Bank.

Reserve Bank Balance Sheet

Liabilities	Assets
1. Currency with the Public	1. Net Credit to Governments by RBI (Central & State Governments)

2. Bank Reserves	2. RBI Credit to Banks!
i) Cash in Hand	
ii) Bankers' Deposits with RBI	
3. Net Non-Monetary Liabilities	3. RBI Credit to Commercial Sector
	4. Net Foreign Exchange Assets with RBI
	5. Cash Liabilities Payable by Government to Public

Net Government Deposits. This includes Treasury Bills held by RBI, securities payable on a fixed date, etc.

RBI and banks' capital, reserves, national funds managed by RBI, Compulsory Deposit Scheme deposits, etc.

1. RBI loans, IDBI, NABARD and other financial institutions (non-banking activities) shares/advances or investments in bonds, purchase or discount of internal bills.
2. The government, as an agent of RBI, prints rupee coins and other small coins.

2.5.1 Factors Affecting Money Multiplier

The money multiplier can be expressed in the following equation form:

$$K_m = \frac{C_r}{R_r + C_r} + 1$$

The various factors in the above equation affect the money multiplier. Money supply is affected based on the money multiplier.

C_r = Ratio of currency to deposits

R_r = Ratio of reserve money to deposits

The above C_r and R_r determine the money multiplier. However, it cannot be said that these ratios alone determine it completely. This is because these ratios can change due to various reasons.

2.6 Money Multiplier

The money multiplier mechanism explains the relationship between money supply and high-powered money. Traditionally, it is believed that the quantity of money supply is a multiple of high-powered money or reserve money. However, the money multiplier is not constant. It also depends on some unidentified factors.

2.6.1 Money Multiplier Process

The money multiplier process is based on the following simple equation:

$$MS = K_m \cdot HS$$

K_m is the money multiplier, HS is high-powered money. This equation states that the quantity of money in the economy is a multiple of high-powered money. High-powered money can be expressed through the following equation:

$$HS = C + R$$

We learned about high-powered money in the previous section. High-powered money includes notes and coins with the public (C) and reserves with bankers (R or R_rD). Equation (7) from the previous section is shown here:

$$MS = K_m \cdot HS$$

$$MS = C_r + R_r C_r + 1 HS$$

We have already learned about the elements in the above equation. According to the above equation, the money multiplier is:

$$K_m = C_r + R_r C_r + 1$$

That is, the money multiplier depends on the ratio of currency to deposits (C_r) and the ratio of reserve money to deposits (R_r).

The measures that determine the quantity of money stock are formulated by the central banks of respective countries. Money based on traditional theories formulated solely on business transactions is called 'narrow money'. Money in the form of financial assets is called 'broad money'. Now let's examine the money multiplier based on money stock in India.

2.6.2 Derivation of Money Multiplier

Money stock in India is referred to as $M1$ to $M4$.

$M1$ = Currency with the public + Demand Deposits + Other deposits with RBI

$M2$ = $M1$ + Savings deposits in Post Office

$M3$ = $M1$ + Time Deposits

$M4$ = $M3$ + All deposits in the Post Office Savings system

Let's find the money multipliers based on narrow money ($M1$) and broad money ($M3$) from the above elements.

2.6.3. Narrow Money Multiplier

According to the definition of narrow money, narrow money is in the following equation form:

$$M1 = K_{m1} \cdot HS$$

In the above equation, K_{m1} = narrow money multiplier, HS = reserve money, $M1$ = narrow money. According to the above equation, the narrow money multiplier can be written as follows:

$$K_{m1} = \frac{M1}{HS}$$

$$M1 = C + DD$$

$$HS = C + R$$

$$D \text{ (Deposits)} = DD \text{ (Demand Deposits)} + TD \text{ (Time Deposits)}$$

$$C = \text{Notes, Coins, } R = \text{Reserves}$$

$$HS = C + R, R = R_r(DD + TD), R_r = \text{Reserve ratio}$$

$$K_m = \frac{C + R_r(DD + TD)}{C + DD}$$

Dividing all the variables in the above equation by DD:

$$K_m = \frac{DDC + R_r(1 + DTD)1 + DDC}{DDC}$$

Therefore, the narrow money multiplier can be expressed as:

$$K_m = \frac{c + R_r(1 + t)1 + c}{c}$$

$$\text{Where, } c = DDC$$

$$t = DTD$$

Derivation of Narrow Money Multiplier

Let's examine the narrow money multiplier with the help of numbers. In India, if the currency to demand deposits ratio (c) is 1.35, the time deposits to demand deposits ratio (t) is 6.04, and the bankers' reserves to total deposits (R_r) is 0.08, then the narrow money multiplier can be found as follows:

$$K_{m1} = \frac{c + R_r(1 + t)1 + c}{c}$$

$$K_{m1} = \frac{1.35 + 0.08(1 + 6.04)1 + 1.35}{1.35}$$

$$K_{m1} = \frac{1.35 + 0.08 \times 7.04 + 1.35}{1.35}$$

$$K_{m1} = \frac{1.35 + 0.5632 + 1.35}{1.35}$$

$$K_{m1} = \frac{3.2632}{1.35}$$

$K_{m1} \approx 1.228$ (The document states 1.24, there might be a slight rounding difference or a different value used for R_r in their calculation).

2.6.4 Broad Money Multiplier (K_{m3})

According to the definition, broad money can be expressed as follows:

$$M_3 = K_{m3} \cdot HS$$

In the above equation, K_{m3} = broad money multiplier, HS = high-powered money, M₃ = broad money. According to this equation, the broad money multiplier can be written as follows:

$$K_{m3} = \frac{M_3}{HS}$$

$$M_3 = C + DD + TD$$

$$HS = C + R$$

$$K_{m3} = \frac{C + R_r(DD + TD)}{C + DD + TD}$$

In the above equation, R_r = reserve ratio. Dividing all variables in the above equation by DD:

$$K_{m3} = \frac{DDC + R_r(DDDD + DDTD)}{DDC + DDDD + DDTD}$$

$$K_{m3} = \frac{c + R_r(1+t)}{c + 1 + t}$$

Where, $c = DDC$ (Currency to Demand Deposits Ratio)

$t = DDTD$ (Time Deposits to Demand Deposits Ratio)

$R_r = DR$ (Bank Reserves to Total Deposits Ratio)

Derivation of Broad Money Multiplier

In India, if $c = 1.35$, $t = 6.04$, and $R_r = 0.08$, then the broad money multiplier can be derived as follows:

$$K_{m3} = \frac{c + R_r(1+t)}{c + 1 + t}$$

$$K_{m3} = \frac{1.35 + 0.08(1 + 6.04)}{1.35 + 1 + 6.04}$$

$$K_{m3} = \frac{1.35 + 0.08 \times 7.04}{8.39}$$

$$K_{m3} = \frac{1.35 + 0.5632}{8.39}$$

$$K_{m3} = 1.91328.39$$

$K_{m3} \approx 4.385$ (The document states 4.4, which is a rounded value).

2.6.5 Factors Affecting Money Multiplier

The main ratios affecting the money multiplier are c , t , R_r .

It cannot be said that these completely affect the money multiplier. This is because these ratios themselves depend on several other factors. The changes in various factors and their effects are explained below:

1. Currency to Demand Deposits Ratio (c or DDC)

The quantity of money supply changes based on currency and demand deposits. There is an inverse relationship between this ratio and money supply. If the currency to demand deposits ratio increases, the value of the money multiplier decreases, and the money supply also decreases.

2. Time Deposits to Demand Deposits Ratio (t or $DDTD$)

Generally, the reserve ratio for time deposits is lower than that for demand deposits. If this ratio, $c(DDC), t(DDTD), R_r(DR)$ holds, then there is a multi-fold expansion of deposits, and the money supply increases. That is, an increase in time and demand deposits leads to an increase in the multiplier, and thus an increase in money supply.

3. Changes in Reserve Ratio (R_r)

Changes in the bankers' reserve ratio in total deposits adversely affect the multiplier. If this ratio increases, meaning a larger amount is kept as reserve, the money supply decreases.

4. Non-borrowed Reserve Money:

If there are borrowed reserves or if banks' discretionary finance increases, the multiplier value increases, leading to monetary expansion.

2.6.6 Critique of Money Multiplier

Despite its widespread use, the money multiplier has been subjected to many criticisms. There are differences of opinion among monetary economists and non-monetary economists regarding the concepts or ratios used in the multiplier. Before understanding these

differences, a broad money multiplier model is presented. $Km3 = c + Ri(1+t)1 + c + t$

1. Among c , t , and Ri in the above money multiplier, which ones can monetary institutions control? Are they static or dynamic? There are disagreements among monetary and non-monetary economists on these and other issues. Non-monetary economists believe these ratios are uncertain, while monetary economists believe they are sufficiently certain.
2. Goodhart, a scholar, calls the concept of money multiplier an identity. He suggests that the money supply equation $M = K H_2$ would be better described as an equilibrium condition rather than a supply function. The currency demand deposit rate, time deposit-demand deposit rates, etc., taken in this multiplier are not sufficient for analysis. Also, this analysis does not prioritize the impact of changes in interest rates.
3. According to this analysis, the reserve money or the quantity of reserve money is assumed to be constant and dependent on the decisions of monetary institutions, which limits the scope of the money multiplier. Goodhart criticized that this monetary decision does not consider the effects of exogenous variables.

2.7 Money Multipliers in India

Table 3.1 below shows the multipliers for narrow money (M_1) and broad money (M_3) in India for 11 years before and 11 years after the economic reforms.

Table

Money Multipliers in India

Year	Narrow Money Multiplier ($K_1 = M_1/H_2$)	Broad Money Multiplier ($K_3 = M_3/H_3$)
1980-81	1.23	2.95
1981-82	1.21	3.05
1982-83	1.23	3.14
1983-84	1.15	2.98
1984-85	1.26	3.24
1985-86	1.15	3.13

1986-87	1.14	3.14
1987-88	1.08	3.05
1988-89	1.07	3.08
1989-90	1.06	3.03
1990-91	1.12	3.17
1991-92	1.15	3.19
1992-93	1.12	3.29
1993-94	1.09	3.11
1994-95	1.14	3.12
1995-96	1.10	3.08
1996-97	1.20	3.48
1997-98	1.18	3.63
1998-99	1.19	3.78
1999-2000	1.22	4.01
2000-2001	1.25	4.33
2001-2002	1.25	4.44
1980-81 to 1990-91	1.15	3.09
1991-92 to 2001-2002	1.17	3.59

Observing Table 3.1, it is understood that the average narrow money multiplier increased from 1.15 before reforms to 1.17 after reforms, while the broad money multiplier increased from 3.09 to 3.59. The following table explains the reasons for this trend.

Table

Trends in Ratios in India

Year	C	t	Rr
1980-81	1.40	3.37	0.13

1990-91	1.35	4.42	0.17
2001-02	1.34	6.04	0.01

Based on the above information, the 'C' ratio slightly decreased after the reforms. This trend indicates stagnation in the banking system. The value of 't' significantly increased after the reforms. This suggests adjustments in portfolio investments due to awareness of higher interest rates on time deposits. The significant decrease in the R value indicates the liberal money policy adopted by the central bank after the reforms.

2.8 Summary

The theory of money supply is a new research area in monetary research. This theory explains the relationship between money stock and reserve money or high-powered money through money multiplier analysis. The size of money stock depends on two factors: 1) factors influencing reserve money, and 2) factors influencing the money multiplier.

Factors on which Reserve or High-Powered Money in India depends:

1. Net credit given by RBI to the government
2. Net credit given by RBI to banks
3. Net credit given by RBI to the commercial sector
4. Net foreign exchange assets held by RBI
5. Debts owed by the government to the public

Factors influencing the money multiplier: 1) Ratio of currency to demand deposits (C) 2) Ratio of time deposits to demand deposits (t) 3) Bankers' reserves in total deposits.

The sizes of money stock in India are referred to as M_1 , M_2 , M_3 , M_4 . M_1 is called narrow money, and M_3 is called broad money. There has been an increase in money stock and money multipliers after the new economic reforms compared to before. The average increase in narrow money multiplier was slight, from 1.15 to 1.17, while the broad money multiplier significantly increased from 3.09 to 3.59.

2.9 Points to Remember

1. Monetary funds can be broadly classified into two: a) Primary functions (measure of value, medium of exchange) b) Secondary functions (measure of future payments, store of value).
2. Methods for determining the quantity of money supply are implemented by central banks. Aggregate money measures in America are M_1 , M_2 , M_3 , L . In Britain, they range from M_0 to M_4 . In Malaysia, money stock is in three concepts: M_1 , M_2 , M_3 , while in India, it is in four concepts: M_1 , M_2 , M_3 , M_4 .
3. Factors determining money supply can be divided into two:
 - a. Factors determining high-powered money
 - b. Factors determining the money multiplier
4. Among the measures of money supply, narrow money (M_1) and broad money (M_3) are important. In India, M_3 is given more importance than M_1 .

5. The value of the money multiplier depends on the portion of deposits held as money and the portion of deposits held as reserves.
6. Factors influencing the money multiplier: a) Currency, demand deposit ratio b) Time deposits, demand deposit ratio c) Changes in reserve ratio d) Non-borrowed reserves (money).

2.10 Key Terms

1. Narrow Money (Near Money): Money that represents the primary characteristic of money, which is a medium of exchange, is called narrow money (M_1).
2. Broad Money (Broad Money): Money that represents the characteristics of money, such as a medium of exchange and a store of value, is called broad money (M_3).
3. High-Powered Money: The money obtained by combining notes and coins held by the public and bank reserves is high-powered money.
4. Money Multiplier: The money multiplier is obtained by dividing the money supply by high-powered money. It indicates the magnitude of the money supply relative to high-powered money.

2.11 Self-Assessment Questions

I. Essay Questions

1. Write about the measures of money stock.
2. Write about reserve money or high-powered money.
3. Analyze the money multiplier.
4. Explain the determinants of the money multiplier and write about the criticisms against it.

II. Short Questions

1. Measures of money stock
2. Define high-powered money
3. Factors on which money depends
4. Derive the money multiplier
5. Factors on which the money multiplier depends

2.12 Recommended Books

1. F.R Glahe: Macro Economics, Theory and Policy, Harcourt Brace Jovanovich, INC, New York.
2. Suraj B. Gupta: Monetary Economics, S Chand and Co. Ltd., New Delhi
3. Narendra Jadar: Monetary Economics for India, Macmillan India Ltd., Delhi
4. Rangarajan, C and Singh, A: Reserve Money, Concepts and Policy implications for India, RBI occasional Papers, 1984.
5. Rudder Datt and Sundaram: Indian Economy, S.Chand & Co., Ltd., New Delhi
6. Reserve Bank of India: Report of the Committee to Revive the Working of the Monetary System, 1988.

Lesson -3

DEMAND FOR MONEY

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3.0 Objectives

This section explains various theories designed to explain changes in the value of money. By the end of this section, you will understand the following:

1. Fisher's Quantity Theory of Money
2. Cambridge Theory
3. Keynes's Liquidity Preference Theory
4. Tobin's Liquidity Preference Theory
5. Baumol's Transaction Demand for Money Theory
6. Milton Friedman's Modern Quantity Theory of Money

3.1 Introduction

Changes in the general price level in the economy have attracted the attention of economists. Some causes of price changes are monetary, while others are non-monetary. Wars, famines, weather, etc., can be considered non-monetary causes. This section explains various theories

formulated based on monetary causes. Fisher's theory, formulated before Keynes, was based on the "medium of exchange" characteristic of money.

The later Cambridge theory was formulated based on the "store of value" characteristic of money. Keynes formulated his theory based on liquidity preference.

Later, Tobin also formulated his theory based on liquidity preference, but he rectified the shortcomings of previous theories. Baumol formulated his theory based on business inventories. Finally, Milton Friedman's modern quantity theory of money is explained. Now let's examine the various theories in detail.

3.2 Classical Quantity Theory of Money

Before, explanations for price changes were given as special causes like wars, famines, weather (non-monetary factors), and changes in money supply. The Quantity Theory of Money first explained that changes in money supply cause changes in the price level.

The explanation of the Quantity Theory of Money, stating that changes in money supply lead to changes in the price level, appeared in the writings of the Physiocrats. In 1752, David Hume used this theory in his Political Discourses in the mechanism of adjustment of foreign trade payments. From the Mercantilists to Hume, their theoretical explanations confirmed a positive or direct relationship between the quantity of money supply and the price level. However, they did not consistently state that it was in an exact proportion. They mentioned that collective output increases due to technological progress and that the velocity of money changes due to changes in the nature of monetary institutions. But they could not consistently state that the price level changes in the same proportion as the change in money supply.

According to the first explanation of this theory, an increase in the quantity of money leads to a decrease in the price level. The classical quantity theory of money was formulated from two perspectives:

1. Fisher's theory or equation (American Version), formulated by considering money as a medium of exchange.
2. Cambridge theory or Cambridge equation (Cambridge Version), formulated based on the "store of value" characteristic of money.

3.2.1 Fisher's Quantity Theory of Money

In this theory, the main reason for demanding money is that money serves as a "medium of exchange." In Fisher's view, wherever exchange takes place between a buyer and a seller, money acts as a medium of exchange for goods, services, or securities. Therefore, Fisher formulated his theory based on the fact that the selling value of goods, services, or securities is equal to the value of money exchanged for them.

According to this theory, if the quantity of money is greater compared to the goods and services available for exchange, the general price level will be higher, or the value of money will be lower. To state Fisher's theory rigidly, if the quantity of money changes in a certain proportion, the prices will also change in the same proportion, or the value will change in the opposite direction in the same proportion. Simply put, if other conditions remain unchanged, an increase in the quantity of money in circulation leads to an increase in the price level, or a

decrease in the value of money. A decrease in the quantity of money leads to a decrease in the price level, or an increase in the value of money.

In 1911, Fisher presented an equation in his book "The Purchasing Power of Money." Fisher states that at a given time, the total quantity of money (MV) in a country is equal to the quantity of goods and services bought or sold (PT) in that country.

$$MV=PT$$

Scientists like Marshall, Pigou, and Walras believe that the demand curve for money is a rectangular hyperbola. According to them, if the money stock doubles, the price level doubles.

Robertson's Equation:

Robertson, a scientist, also provided an equation similar to Pigou's equation with minor differences. Robertson's equation is as follows:

$$M=kPt$$

$$P=kTM$$

Where:

P= Price level (inverse of the value of money)

T= Total goods and services (R in Pigou's equation)

k= Quantity of money people wish to hold in cash or the ratio of T (this equation is easier to compare than Pigou's equation).

Keynes' Equation:

Keynes provided the cash balance equation based on consumer goods. Keynes explained his theory through the following two equations:

$$n=pk$$

and

$$n=P(K+rk1)$$

In the above equations, n is the total money in circulation, p is the price level of consumer goods, k is the quantity of consumer goods people wish to hold in money form (kT in Pigou's equation, kR in Robertson's equation), k1 is the consumer goods people hold in the form of bank deposits, and r is the ratio of cash bankers hold in bank deposits (k').

If k, k' and r remain constant, then n and p collectively increase or decrease in equal proportion. This equation is also similar to the Marshall, Pigou, and Robertson equations.

The Cambridge equation is in many ways better than the Fisher equation. However, this equation has also been subject to many criticisms.

Criticisms:

1. The Cambridge equation is not sufficient to explain the nature of prices in a dynamic economic system. This equation also does not provide an explanation for changes in prices that occur in a cyclical rotation in a dynamic economic system.
2. This theory did not consider speculative demand. Today, speculation is an important factor in determining the demand for money. In addition, this theory did not explain the interest rate.
3. This theory examined income levels but did not consider productivity, liquidity preference, etc., which are very important in determining the value of money.
4. The assumptions that k and T are constant and that the demand for money is unit elastic indicate the unreality of this theory.
5. In this equation, the cash balances of all classes of people are stated as a total. However, the cash balances of people of different income groups vary. The determinants also vary when determining their cash balances, and the ratios of changes in cash balances of different groups are also highly important matters. However, they are not given importance in this equation.

Similarities between Fisher-Cambridge Equations:

1. The Fisher equation was formulated based on the characteristic that money acts as a medium of exchange, while the Cambridge equation was formulated based on another characteristic of money, the store of value.
2. Fisher's theory explains value over a period of time using the velocity of money (V). The Cambridge equation explains the value of money at a point in time, using the demand for money balances (k). However, if we observe both equations, Fisher's equation uses $1/K$ to find (V), while the Cambridge equation uses $1/V$ for k . If we substitute $1/k$ for V in the equation of exchange $MV=PT$, we get the equation $M=kPT$. This is the cash balance equation. If we substitute $1/V$ for k in this cash balance equation $M=kPT$, we get the equation of exchange.
3. According to Robertson, the two equations are two observations describing the same phenomenon. The equation of exchange or Fisher's equation considers money as a flow, while the cash balance equation or Cambridge equation considers money as a stock. It is said that the equations are formulated based on the velocity of money (V) in the equation of exchange and the demand for cash balances (k) in the ratio of cash balances.
4. Hansen says that the cash balance theory is superior to the equation of exchange theory. Marshall's equation $M=kY$ is a new development in the theory of money and prices. Hansen says that it is not true that this theory is another form of the quantity theory of money.
5. The key difference between the equation of exchange theory and the cash balance theory can be stated as follows: According to Marshall's equation, due to people's desire to hold money, even if the monetary mechanism attempts to control the money supply, sudden changes occur in the demand for money. Therefore, the key factor for the demand for money is liquidity preference. These sudden changes cause changes in the value of (K). As a result, income and price levels also change. According to Marshall, these changes can be either decreasing or increasing.

3.9 Keynes' Theory of Liquidity Preference

Since Keynes was a student of Alfred Marshall at Cambridge University, Keynes' theory also follows the lines of the Cambridge theory. However, Keynes' theory provides a better analysis than previous theories. According to Keynes, individuals or firms demand money or hold money balances for three purposes: 1) Transaction motive 2) Precautionary motive 3) Speculative motive.

1. Demand for Transaction Motive:

Individuals or firms demand some money for their daily activities or for their planned needs. The amount demanded for transaction purposes depends on the income level and institutional factors.

2. Demand for Precautionary Motive:

A certain amount of money is held or demanded to meet unplanned or unforeseen needs. The amount demanded for this purpose also depends on the income level and institutional factors.

Keynes denoted the total amount demanded for transaction and precautionary motives as M_1 . If individuals and firms are assumed to behave in the same way, Keynes expresses this demand as follows:

$$M_1 = kY$$

Where M_1 = Demand for money for transaction and precautionary purposes, Y = Money income, k = Inverse of velocity ($1/V$). This demand does not change with the interest rate.

3. Demand for Speculative Motive:

The second reason individuals demand money is for speculation or converting it into bonds. In his analysis, Keynes considered only the interest rate as a variable. He expressed the present value of bonds as P_v and the present value function as follows:

$$P_v = iR \quad (1)$$

Where R = Annual fixed return from bonds, i = Interest rate.

Let's now examine whether individuals prefer to hold their money in cash. If the interest rate is assumed to be constant, people are interested in holding all their money in the form of bonds. This is because bonds give them a positive return. If the interest rate is not assumed to be constant, holding or not holding money in the form of bonds depends on future changes in interest rates. If people expect the interest rate to fall in the future, they will get more capital gains on assets held in the form of bonds. Therefore, they will convert it into bonds. If the interest rate increases, they will incur capital losses. Therefore, people are interested in holding cash. Keynes explains how people estimate whether the interest rate will increase or decrease. Every individual compares the normal or long-term interest rate with the current interest rate to decide whether the interest rate will increase or decrease in the future. If the normal interest rate is lower than the current interest rate, they expect future interest rates to fall below current interest rates. Conversely, if the normal interest rate is higher than the current interest rate, they expect future interest rates to rise above current rates. Based on this, they estimate whether they will gain or lose from bonds in the future. Based on these estimates, asset holders decide whether to hold their assets in money form or not.

From the above explanation, it can be seen that speculative demand depends on the current interest rate. Keynes expressed the aggregate cash balance speculative demand as follows:

$$M_{sp}=h(i)$$

Where M = Speculative demand, i = Interest rate.

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Keynes's speculative money demand is analyzed in the diagram below (Figure 3.3).

Figure 3.3: Demand for money for speculative purposes.

Interest Rate
ic

M

Demand for Money

In the diagram, ic is the critical interest rate, at which the slope of the speculative demand curve becomes zero. This is called the liquidity trap.

According to Keynes, aggregate money demand (md) is obtained by combining transaction and speculative demands.

$$md=m1+M_{sp}=kY+h(i)$$

The diagram below (Figure 4.4) explains the demand for money.

Figure 3.4: Deriving the Demand for Money

A. Diagram
B. Diagram
Y1 Y2 Y3 Y4

$$Y1<Y2<Y3<Y4$$

$$M1=kY$$

$$M_{sp}=h(1)$$

0

Mt

M

C. Diagram
C. Diagram
Transaction Demand

MP

M

Speculative Demand

Total Demand

In Figure 3.4 A, the transaction demand is shown at various income levels $Y_1 < Y_2 < Y_3 < Y_4$. Since transaction demand does not change with the interest rate, these demand curves are parallel to the Y-axis. In Figure 4 B, speculative demand is shown. In this diagram, the liquidity trap occurs. In Figure 4 C, the total demand curves are shown. The velocity of money can be expressed as follows:

3.11 Macroeconomics

$$V = M_d Y$$

V = Velocity of money

Demand for Money

Later, Keynes rejected the idea that velocity (V) remains constant in the short run. Speculative funds change with the interest rate. This means that m is not constant in the short run, so Keynes argues that changes in V will occur at a given income (Y).

Superiority of Keynes' Theory

Keynes did not directly explain the relationship between changes in the money supply and changes in prices in his theory, but he did so indirectly. Keynes' analysis is part of the general value theory, not an independent analysis. Keynes' theory is better than the quantity theories of money in the following aspects:

1. Keynes removed the major flaw in the quantity theory of money, which states that changes in the money supply determine prices. According to him, the price levels are influenced by interest rates, investment, employment, output, and real income. In his theory, Keynes explained consumption, investment, liquidity preference, interest rates, etc., providing a better analysis than previous theories.
2. Keynes combined the theory of money with the theory of value in his theory. Individual prices depend on production costs, demand, and supply elasticity. However, general prices are influenced by many factors such as production costs, supply, employment, etc.
3. Traditional theory did not consider the interest rate, except for the money supply and price level. However, Keynes considered and integrated them with the interest rate.
4. Unlike the traditional theory, Keynes explained that an increase in the money supply does not cause an increase in prices, and prices only increase after the full employment level is reached. He also explained the necessity of increasing the money supply during an economic depression.

3.4 Tobin's Theory of Liquidity Preference

After Keynes, Tobin's theory of liquidity preference was formulated based on the demand for money. Tobin refuted two unrealistic assumptions in Keynes's speculative demand theory and explained his own theory. These are:

1. Individuals always hold all their assets either in the form of bonds or in the form of money.

2. Every individual decides whether the interest rate will increase in the future by comparing it with the normal interest rate.

Assumptions:

1. Individuals always prefer to hold a portion of their assets in the form of bonds and the rest in the form of money.
2. The future interest rate is uncertain; individuals cannot form a definite opinion about what the future interest rate will be.
3. According to people's thinking, individuals always prefer to acquire more assets.
4. Individuals are always interested in increasing their wealth.

Based on these assumptions, Tobin proposed his theory.

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Proposition of the Theory

Demand for Money

If an individual converts all his assets into bonds, there will be maximum growth. However, this also entails maximum risk. If he holds all his assets in money form, growth will be zero, and risk will also be zero. But an individual wishes to hold some of his assets in bonds and some in money form. Assuming that an individual is risk-averse, he prefers less risk to more risk at a given rate of return. How much asset will he hold in bonds? How much will he hold in money? This depends on his nature between growth and risk or growthlessness with certainty. Tobin formulated the liquidity function by analyzing economic growth and risks through indifference curves. The diagram below (Figure 3.5) explains Tobin's analysis. In the diagram below, the Y-axis represents the value of the asset after a specified period, and the X-axis represents the asset risk borne by converting the asset into bonds.

Figure 3.5

$1+i$

I_2

I_1

I

I_0

W_0

PR_1

A

Asset Risk

PRM PR

If an individual converts his total asset W_0 into bonds, it means he is taking the highest or maximum risk. This maximum risk is shown as PR . If the return on bonds is assumed to be $i\%$, then since he has taken maximum risk, the value he can obtain from that asset after a

specified period is $W_0(1+i)$. The straight line connecting W_0 and point A represents the expected asset value and the risk borne by an individual after a specified period. This W_0A line indicates the expected asset value and the risk-bearing opportunity factors. This line is called the budget line or budget constraint line. Since the intercept of this line is W_0 , the slope of this line is as follows:

$$PR_m W_0(1+i) - W_0 = PR_m i W_0$$

Since W_0 and PR_m are constants, the slope of the budget line depends on the interest rate on bonds. If the interest rate on bonds increases, the slope increases. In the diagram above, I_0 , I_1 , I_2 are indifference curves representing the behavior of individuals between income growth and asset risk. Among these, I_1 is preferred over I_0 , and I_2 is preferred over I_1 . These curves have a positive slope because if higher asset growth is desired, asset risk is also higher. If lower asset growth is desired,

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Demand for Money

The point of tangency is the equilibrium point that gives maximum welfare. At this point, individuals desire a risk of PR_1 .

Figure 3.6

Figure B

25

Demand

Demand for Money

In the diagrams above, the budget constraint lines are drawn at various interest rates, such that $i_0 < i_1 < i_2$. Let's examine the behavior of an asset-holding individual between his budget lines and indifference curves I_0, I_1, I_2 . Initially, he moves from point B (tangency) to point C due to an increase in the interest rate, and then to point D. Based on this diagram, if the interest rate increases, individuals reduce the amount of money they demand. To show this relationship, Tobin used Keynes's speculative demand M_{sp} and showed that the money demand curve slopes downwards from left to right in Figure 4.6 B.

Empirical research reveals that most liquidity preference curves slope downwards from left to right. However, it cannot always be said that this will be the case. Observing the diagram below, in some cases, the money demand curve slopes upwards from left to right.

The diagram below (Figure 4.7) illustrates the effects of changes in interest rates on asset choice.

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Figure 3.7

Demand for Money

In the above diagram, as the interest rate increases, the demand for money also increases. In some cases, even if the interest rate increases, the demand for money may remain constant. The diagram below illustrates this. In Figure 4.8 below, the liquidity preference curve is parallel to the Y-axis.

Figure 3.8

Individual's Liquidity Preference Curve

Tobin's theory provides a better explanation than Keynes's theory. This theory answered the criticisms of Keynes's theory. Moreover, it reveals that people, at the same time, take changes in interest rates as a basis and hold some amount of cash and some bonds.

Authority of Tobin's Theory

Although Keynes and Tobin appear to have formulated theories based on liquidity preference, there is a significant difference between these two theories. The difference lies in the assumptions and propositions on which these two theories are based. Tobin's theory was formulated on more reasonable assumptions, overcoming the criticisms of Keynes's speculative demand. Therefore, the criticisms leveled against Keynes's theory do not apply to this theory.

3.5 Baumol's Transaction Theory

William J. Baumol, a scientist, explained his theory of money transactions from the perspective of business (inventory) inventories.

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Demand for Money

Money is a universally accepted medium of exchange, so people wish to hold it. However, if money is held in the form of (inventory) inventories, the interest that would have been earned by converting that money into bonds is lost. This lost interest rate is called the interest cost of holding money. There are also some non-interest costs of holding money. For example, brokerage fees for converting bonds into money, and expenses incurred to go to the broker. Thus, the interest cost and non-interest costs of holding money depend on the amount of money people wish to hold. Baumol formulated his theory with the idea that individuals and firms in the economy will hold the amount of money in inventory form that minimizes costs. Baumol's theory is based on the following assumptions:

1. Individuals or firms have complete knowledge of how many transactions they will have to conduct in the future.
2. All payments occur in a steady stream or in a fixed order.
3. The income required by individuals and firms for transactions in a year is Y dollars.
4. Individuals and firms obtain the money required for their transactions by selling bonds. The cash obtained by selling bonds at once is M_t .
5. The interest cost or opportunity cost of holding money in inventory form is i dollars per dollar per year.
6. The non-interest cost of holding money is b , the cost incurred to convert bonds into money once.

Proposition of the Theory

According to Baumol, an individual or firm needs to obtain the money required for their transactions in a year by selling bonds. However, bonds can be sold at once or in two installments. Let the required money be Y dollars, and let the money obtained by selling bonds at the beginning of the year be M_t . Therefore,

$$M_t = Y \quad (1)$$

Now, at the end of the year, he will have no money or '0' dollars. Therefore, the average money he has during the year is $2Y + 0 = 2Y$. The cost of demanding this money is

$OC=2Yi=2Mt i$. If an individual or firm wishes to obtain the required income by selling bonds twice, then

$Mt=2Y$. Then the average money held in six months is $(Y/2)/2$. This is the money opportunity cost.

Opportunity Cost:

$$Oc=2 \cdot \frac{1}{2} (2y)(2i) + 2 \cdot \frac{1}{2} (2y)(2i) = (2y)(2i) \dots\dots\dots 2$$

Here, $1/2$ is the semi-annual interest rate. In this way, it can be shown that the interest cost is the same regardless of how many times bonds are sold to obtain Y dollars.

However, in addition to the interest cost, there is also a non-interest cost 'b' for converting bonds. If the number of bond conversions in a year is Y/Mt , then the annual non-interest cost is bY/Mt . The total interest cost and non-interest cost can be expressed as follows:

$$(\sigma = Mtby + 2iMt \dots\dots\dots 3)$$

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Demand for Money

Baumol indicates the money stock (M) at which the total cost (σ) is minimized as follows:

$$(Mi = i2bY)$$

$$Mt = i2(b/P)(Y/P) = i2BY \dots\dots\dots$$

Dividing both sides of the above equation by the price level (P):

$$Y/PB$$

$$M/P$$

$$= \text{Real money transaction demand}$$

$$= \text{Real non-interest cost}$$

$$= \text{Real income}$$

$$= \text{Interest rate}$$

$$= 2BY$$

According to $I=s$, the cost is minimized when money is held. In other words, an individual's or firm's real money transaction demand is directly proportional to the square root of real income and inversely proportional to the square root of the interest rate. Therefore, it is also called the Square Root Rule. The total demand of all individuals and firms is called aggregate transaction demand. This aggregate demand is the same as the above equation. If the above equation is easily shown in a functional relationship, it will be as follows:

$$Mt = g(IY) \quad (6)$$

Baumol's theory has given two important theoretical conclusions.

1. The demand for money transactions changes with the interest rate (it has interest rate elasticity). If the interest rate increases at a given income, the real money transaction demand decreases. Therefore, the money demand curves are as shown in Figure 4.9 below.
2. Secondly, according to equation 5, as real income increases, real money transactions also increase. However, they increase less than the increase in real income. This indicates that there are economies of scale when using money. The demand curves derived from the points in Figure 3.1 are shown in Figure 9b. The concave nature of the curve indicates economies of scale.

Demand for Money Transactions

This theory states that the demand for real money transactions is directly proportional to the square root of real income. Furthermore, at a given real income level, the demand for real money transactions is inversely proportional to the square root of the interest rate. Thus, it can be said that Baumol's theory, from its assumptions to its conclusion, is better than Keynes's theory and closer to reality.

Superiority of Baumol's Theory over Keynes's Theory of Demand for Money Transactions. According to Keynes, individuals and firms conduct their business transactions whether they anticipate the future or not. The amount of money they keep with them for transactions depends on their income. Keynes's theory states that if income is high, the number of transactions will be high, and if income is low, the number of transactions will be low.

However, in Baumol's theory, individuals and firms also keep money for their transactions, but Baumol states that keeping money in this way incurs some cost. According to him, the demand for money transactions depends not only on real income but also on the interest rate.

3.6 Milton Friedman's Modern Quantity Theory of Money

According to Milton Friedman, quantity theorists believe in three things:

1. The demand for money has high stability.
2. Factors affecting the supply of money are more independent than those affecting the demand for money.
3. Thrift determines the interest rate due to productive forces.

Friedman classified money demanders into two categories. The first category includes those with wealth who consider keeping wealth in monetary form. The second category includes entrepreneurs, i.e., firms, who consider money as a factor of production. According to Friedman, the demand for money by wealth holders depends on the following variables:

1. Total Real Wealth (W)

According to Friedman, total real wealth includes human wealth and non-human wealth.

If wealth increases, permanent income increases. Therefore, the demand for money also increases. The relationship between wealth and money demand is a direct relationship.

2. Percentage of Non-Human Wealth in Total Wealth (Ω)

Total wealth includes human wealth and non-human wealth. Human wealth has low liquidity. Non-human wealth has high liquidity. If the percentage of non-human wealth (Ω) in total

wealth decreases, the demand for money will be higher. The relationship between non-human wealth and money demand in total wealth is an inverse relationship.

3. Relative Rate of Return on Money

Like other goods, demanding money in cash form depends on the cost involved. Money can be easily converted into non-monetary assets. If money is not converted into an asset, the return from having a non-monetary asset will be lost. This is called the cost of holding money in cash form. However, the magnitude of the cost of holding money depends on the difference between the return from money and the non-monetary return. There is no return on money if it is held close. If there is no change in prices, there will be no change in the value of money. But if prices are falling, the value of money increases, so money yields a positive return. If prices are rising, money yields a negative return. The rate at which the price level changes becomes the return on money. For example, if you hold 100 dollars in cash, and assume an annual price decrease of 4 percent, the real value of money at the end of the year will be 104 dollars. The internal rate of return on money is $(104/100)-1=0.04$. This is called the rate of price decrease.

Let's assume the current market interest rate is 6 percent. Now, the cost of holding money in cash is $6-4=2$ percent. If prices are rising, the internal rate of return will be negative. Now, if we consider the price level as P , and the change in price as ΔP , the rate of return on money will be $\Delta P/P$. Let's assume the rate of return on non-monetary assets is i . If prices are rising, the rate of return on holding money will be $-(\Delta P/P)$. Compared to non-monetary assets, the rate of return on money will be $(-\Delta P/P)-i$. If prices are falling, the rate of return will be positive.

Other Variables Determining the Utility of Money

Broadly speaking, people's understanding of the economy influences the demand for money. If people expect a future war or economic recession, the demand for money increases. Instability in the capital market leads to increased turnover of bonds and equity shares, increasing the demand for money. In this way, other factors influence the utility of money and thereby the demand for money. To account for these factors, Friedman added a variable 'U'. Friedman represented the individual demand function or the quantity of money demanded by individuals (wealth holders) as follows:

$$M = f(W, 1/P, U) \quad (1)$$

The main problem here is the lack of reliable information regarding 'W'. Since $W = Y_p + i$, Friedman used Y_p in place of W . Y_p refers to permanent income. Now, equation (1) changes as follows:

$$M_d = F(Y_p, \Omega, I, \Delta P/P, U) \quad (2)$$

Summing all individual money demands gives the aggregate money demand function (of all wealth holders). Therefore, equation (2) can be considered the aggregate demand function, because the aggregate demand function resembles the aggregate demand function.

Firms' Demand Function

Firms consider money as a factor of production. All the wealth held by business firms is in the form of non-human wealth.

Therefore, the variable ' Ω ' will be equal to one or have unity. Hence, the variable Ω is not a factor determining the demand for money by business firms. Therefore, it is not necessary to

include it in the firms' demand function. The variable Friedman added to the firms' demand function is the type of business activity. This influences the demand for money. Friedman considered business income as the variable determining the demand for money. Like individuals, firms are also influenced by changes in interest rates or prices.

Comparing the variables of individuals or firms that determine the demand for money, no other change is visible except for the effect of variable Ω . Since this variable has no effect on firms, the firms' demand will be without Ω . Therefore, the firms' demand function can be stated as follows:

Total Demand for Money

$$(M_d = f(Y_p, i, P, \Delta P, U)) \dots \dots 3$$

Observing the individuals' money equation and the firms' demand equation, no other change is visible except in variable ' Ω '. Friedman proposed the total demand function by combining these two equations.

$$M_d = f(Y_p, \Omega, i, \Delta P/P, U) \dots \dots (4)$$

In equation (4), M_d = Aggregate demand for money, Y_p = Aggregate permanent income.

Assuming that prices are currently stable, and Ω , U are institutional variables that remain constant, equation (4) changes as follows:

$$M_d = f(Y_p, i) \dots \dots (5)$$

This equation (5) can be made simpler. Since permanent income is the weighted average of past years, this income does not change for some time. Therefore, since $Y_p = Y$, the above equation (5) changes as follows:

$$M_d = f(i, Y)$$

Friedman's theory is a synthesis of Keynes-Baumol-Tobin theories.

Milton Friedman's quantity theory of money can be described as a synthesis of Keynes-Baumol-Tobin. Combining Keynes's equation $M_s = h(i)$ and Baumol's equation $M_t = g(i, Y)$:

$$M_d = M_1 + M_2$$

$$= g(i, Y) + h(i)$$

These two are separate parts. These can be combined and written as:

$$M_d = f(i, Y)$$

Observing this equation and Friedman's equation, they are similar. However, in Friedman's theory, Ω and U are institutional variables, which are assumed to be constant in the short run, and there is no change in income in the past, which makes it appear as a synthesis of Keynes, Baumol, and Tobin theories. However, it should be noted that theoretically, these two are not the same.

3.7 Summary

In this section, we learned about the theories of various scientists designed to analyze changes in monetary values. The classical quantity theory of money, which includes Fisher's quantity theory, was based on the medium of exchange characteristic of money, while the Cambridge theory was based on the store of value characteristic. Overcoming the shortcomings of these theories, Keynes developed the liquidity preference theory. However, criticizing the shortcomings in Keynes's theory, namely 1) individuals always hold all assets in the form of bonds or money, and 2) they make decisions about whether interest rates will rise in the future by comparing the current interest rate with the normal interest rate, Tobin also developed a theory based on liquidity preference.

Tobin developed a theory based on liquidity preference, criticizing the decision of whether interest rates will rise. According to Tobin, individuals hold some of their assets in the form of bonds and some in the form of money, and individuals always prefer more assets to less, and are interested in increasing their assets. Based on these assumptions, Tobin explained how individuals maximize their welfare. However, the scientist Baumol developed his theory by assuming that people incur some cost for holding money and that rational individuals try to minimize this cost. Later, Milton Friedman's theory was developed by considering money as a capital asset. According to him, the factors determining the demand for real money are total permanent income, non-human assets in total wealth, interest rate, and the rate of change in prices. If other things remain unchanged, demand increases if permanent income increases, and decreases if it decreases.

3.8 Points to Remember

The classical quantity theory of money was developed from two perspectives.

The concept of cash exchange or Fisher's theory

The concept of cash balances or Cambridge theory

Money Supply (MV) = Money Demand (PT). The equation adding bank money is Money Supply (MV+M'V') = Money Demand (PT).

2. In Fisher's theory, Fisher developed it based on the characteristic of money as a 'medium of exchange'. Fisher's equation.

A3. The Cambridge theory was developed based on the characteristic of money as a store of value. In this theory, the equation given by Pigou is Money Supply (M) = Money Demand (KY) or

$$M=kPY$$

Robert Sir's equation $M=kPY$ and Keynes's equation $N=pk$ were explained.

4.a) According to Keynes, there are three motives for demanding money: 1. Transaction motive, 2. Precautionary motive, 3. Speculative motive. While transaction and precautionary demands depend on income, speculative demand depends on the interest rate.

b) According to Keynes, the transaction demand equation is ($M_d=kY$), and the speculative demand equation is ($M_s=h(i)$). The total demand can be stated as follows:

$$M_d = M_1 + M_2 - kY + I(i)$$

5.a. According to Tobin's theory, individuals hold some assets in monetary form and some in bond form.

b) Individuals are always interested in acquiring more assets and increasing their assets.

c) Generally, if people desire more economic growth, the risk is also higher. If people desire less economic growth, the risk is also lower. Tobin explains the maximum welfare they achieve between these two through an indifference curve. Tobin explains that maximum welfare is achieved at the point where the budget line related to asset risk and the expected asset value at the end of a specific period touch the indifference curve.

6. In an economy, people incur some cost for holding money. Therefore, Baumol states that people will hold the amount of money that minimizes this cost. These costs include interest expenses and other expenses. Baumol represents the quantity at which these costs are minimal as follows:

$$M_t = 2BY$$

7.a) According to Milton Friedman, the individual demand function resembles the aggregate demand. We show both in the same way.

$$M = 1(Y_p, \Omega, I, \Delta P/P, U)$$

The variable Ω has no effect on the firms' demand function. Combining both, the total demand function will also be the same as above.

b) Although Milton-Friedman's equation appears to be a synthesis of Keynes-Baumol-Tobin equations, theoretically, they are not the same.

3.9 Key Terms

1. Velocity of circulation: The number of times a unit of money changes hands within a given period.

Liquidity preference: The desire to hold money in cash form.

3. Normal interest rate: Long-term interest rate.

Risk: Uncertainty in the future.

3.10 Self-Assessment Questions

1. Critically explain the classical quantity theory of money?
2. Discuss whether the Cambridge model is better than the Fisher model?
3. Explain Keynes's theory of money demand?
4. State Baumol's theory of money transactions and explain how this theory is better than Keynes's theory?
5. Critically discuss James Tobin's theory?
6. Explain Milton Friedman's modern quantity theory of money?
7. Briefly write about the theories of money demand developed after Keynes?

3.11 Books to Read

1. F.R. Glahe: 'Macro Economics' Theory and Policy, Harcourt Brace, Jovanovich, INC, 1973.
2. James Tobin: "Liquidity Preference as a Behaviour Towards Risk", Review of Economic Studies, February 1958, P.P65-86.
3. W.J. Baumol: 'The Transactions Demand For Cash-A Restatement in Studies in Quantity Theory of Money', M.Friedman (ed), Univirsity of Chicago Press, Chi cago, 1957, P.P.3-21.
4. D.E.W,. Laidler: 'The Demand for Money', International Text Book Company, Scranton. 'PENNSTLVANIA', 1969.

Lesson - 4

MODERN THEORY OF INTEREST

Objectives: This section explains how equilibrium is achieved simultaneously in real and monetary markets by merging real and monetary factors, as income and interest rates are interdependent. This section examines the simultaneous determination of income level and interest rate through the IS-LM model developed by Hicks-Hansen.

4.1 Introduction

4.2 Interrelationship of Goods and Money Markets

4.3 Assumptions

4.4 Goods Market Equilibrium - IS Curve

4.5 Money Market Equilibrium - LM Curve

4.6 Comprehensive Equilibrium of Goods Market and Money Market

4.7 Changes in IS Curve

4.8 Changes in LM Curve

4.9 Simultaneous Changes in Investment and Money Supply

4.10 Keynesian Range, Intermediate Range, Classical Range.

4.11

4.12 Key Terms

4.13 Self-Assessment Questions

4.14 Books to Read

4.1. Introduction:

Neither the savings-investment theory proposed by classical economists, nor the neo-classical theory, nor Keynes's liquidity preference theory of interest, could satisfactorily explain how the interest rate is determined. In modern times, economists Professor J.R. Hicks and Professor Alvin Hansen collected important elements from the classical and Keynesian theories of interest rate determination and developed a new theory. This is called the Modern Theory of Interest, the IS-LM Model, the Integrated Model of Real and Monetary Sectors, or the Hicks-Hansen Model. Classical economists' and Keynes's theories of interest rate assumed that the income level was given to determine the interest rate. This means that if the income level is unknown in these theories, the interest rate cannot be determined. Keynes's theory of income determination assumed that the interest rate was given. This means that

Part - B explains the equilibrium of savings and investments. Here, we have taken investment on the X-axis and savings on the Y-axis.

Here, the 45° line indicates the equality of savings and investments. Part-C represents the savings function. Here, we have taken income on the X-axis and savings on the Y-axis. This line indicates the direct relationship between savings and income.

Part D - represents the goods market equilibrium. Here, we have taken income on the X-axis and the interest rate on the Y-axis: In Part A, at a 5% interest rate, the investment is 30. In Part - B, with an investment of 30, savings are 30. In Part - C, with savings of 30, the income is 140. By combining the 5% interest rate from Part - A and the income of 140 from Part - C, a point is formed in Part - D.

Similarly, at a 6% interest rate, the investment is 20. In Part - B, with an investment of 20, savings are 20. In Part - C, with savings of 20, the income is 120. By combining the 6% interest rate from Part - A and the income of 120 from Part-C, another point is formed in Part-D.

The IS curve is formed by joining such a collection of points. Every point on the IS curve indicates equilibrium in the goods market.

In Figure 4.4, the goods market is in equilibrium with an income level of 120 when the interest rate is 6%, and with an income level of 140 when the interest rate is 5%. Points E and F indicate disequilibrium. At point E, $S > I$ or $I < S$. At point F, $I > S$ or $S < I$.

Due to changes in the interest rate and income, disequilibrium occurred at point E. As shown in the figure, looking through the upward arrow mark (↑), there is no change in income in equilibrium or disequilibrium. But in disequilibrium, the interest rate increased. Since there is no change in income, there is no change in savings. But due to the increase in the interest rate, investment decreases. Therefore, at point E, $S > I$ or $I < S$. To explain this disequilibrium in another way, looking through the arrow mark moving from left to right (→), there is no change in the interest rate in equilibrium or disequilibrium. But in disequilibrium, income increased. Since there is no change in the interest rate, there is no change in investment. But due to the increase in income, savings increase. Therefore, at point E, $S > I$ or $I < S$.

Due to changes in the interest rate and income, disequilibrium occurred at point F. As shown in the figure, looking through the downward arrow mark (↓), there is no change in income in equilibrium or disequilibrium. But in disequilibrium, the interest rate decreased. Since there is no change in income, there is no change in savings. But due to the decrease in the interest rate, investment increases. Therefore, at point F, $I > S$ or $S < I$. To explain this disequilibrium in another way, looking through the arrow mark moving from right to left (←), there is no change in the interest rate in equilibrium or disequilibrium. But in disequilibrium, income decreased. Since there is no change in the interest rate, there is no change in investment. But due to the decrease in income, savings decrease. Therefore, at point F, $S < I$ or $I > S$.

Any point to the right of the IS curve indicates $S > I$ or $I < S$. All points to the left of the IS curve indicate $S < I$ or $I > S$.

Deriving the IS curve using the equation method:

$I = f(r)$ (1) Investment function

$S = I$ (2)

I = Investment

$S = f(y)$ (3)

S = Savings

$Y = C + I$ (4) C = Consumption

I_a = Autonomous investment

b_y = Investment dependent on income.

$I = I_a + e_y$ (6) C_a = Autonomous consumption

e = Marginal Propensity to Invest (MPI)

b = Marginal Propensity to Consume (MPC)

Substituting equations 5 and 6 into the equation $Y = C + I$:

$$Y = C_a + b_y Y + I_a + e_y Y$$

$$Y - b_y Y - e_y Y = C_a + I_a$$

$$Y(1 - b - e) = C_a + I_a$$

$$Y = \frac{1}{1 - b - e}(C_a + I_a) \quad (7)$$

If e_r is considered as investment dependent on the interest rate,

$$I = I_a + e_r \quad (8)$$

Now, substituting equations (5) and (8) into the equation $Y = C + I$:

$$Y = C_a + b_y Y + I_a + e_r$$

$$Y - b_y Y = C_a + I_a + e_r$$

$$Y(1 - b) = C_a + I_a + e_r$$

$$Y = \frac{1}{1 - b} \frac{1}{1 - e} (C_a + I_a) + \frac{e_r}{1 - b} \quad (9)$$

When $1 - b = K$,

This is considered the IS curve equation when the goods market is in equilibrium.

4.5 Money Market Equilibrium:

Money market equilibrium occurs when money supply equals money demand. The total demand for money has three components: (1) Transactional demand for money (2) Precautionary demand for money.

Let's call the sum of these two M_t . Both of these are influenced by income and are in a fixed proportion to income. This fixed proportion is denoted as K .

(3) Speculative demand for money. Let's call this MSP . MSP depends on the interest rate.

$$MD = MDA + MSP \quad (1)$$

Interest Rate

33

MDA

10

$$MD = K_1 + K_2 r = K(Y) \quad (2)$$

$$MD_p = h(r) \quad (3)$$

$$MD = K(y) + h(r) \quad (4)$$

Let's assume the money supply is constant.

Money Supply $MS = 100$

Money Market Equilibrium $MD = MS$

MOA

Part A - Speculative Demand for Money Function

Part B - $MD_A + MD_P$

Part C - Transactional Demand for Money

Part D - Money Market Equilibrium

Money market equilibrium is shown in Figure 4.5. Part A - Speculative demand for money is shown on the X-axis and interest rate on the Y-axis. If the interest rate increases, speculative demand for money decreases. If the interest rate decreases, speculative demand for money increases. This means there is an inverse relationship between the two. Part B - Money supply MS is shown as constant, i.e., 100, and $MS = MD$. The division of money demand into two parts is also shown. Speculative demand for money is on the X-axis. Transactional demand for money is on the Y-axis. At equilibrium, since MS is constant, MD must also be constant for $MD = MS$. Therefore, the money market will be in equilibrium when speculative demand for money increases and transactional demand for money decreases, or when speculative demand for money decreases and transactional demand for money increases.

Part C - The relationship between transactional demand for money and income is shown. Income is on the X-axis and transactional demand for money is on the Y-axis. There is a direct relationship between the two.

$$MT = KY$$

Therefore, as income increases, transactional demand for money increases, and as income decreases, transactional demand for money decreases.

Part D - Money market equilibrium is shown. Income is on the X-axis and interest rate on the Y-axis. In Part A, at a 5% interest rate, total money supply = 100 = MD . Of this, 50 is speculative demand for money and the remaining 50 is transactional demand for money. In Part C, when transactional demand for money is 50, the required income is 100, because $K = 1/2$. In Part A, when the interest rate is 5%, speculative demand for money is 50. In Part B, when speculative demand for money is 50, transactional demand for money is 50. In Part C, when transactional demand for money is 50, income in Part C is 100. By combining the 5% interest rate from Part A with the income of 100 from Part C, a point is formed in Part D. Similarly, starting from a 6% interest rate in Part A and bringing it to D, another point is formed. By joining such points, the LM curve is formed.

The LM curve generally slopes upwards from left to right. The lower part of the LM curve is parallel to the X-axis, and the upper part is parallel to the Y-axis. Therefore, the LM curve

can be divided into three parts. The first part is parallel to the X-axis. This is because a liquidity trap occurs at low interest rates. The liquidity trap is parallel to the X-axis. Corresponding to this part, a segment parallel to the X-axis is formed in the LM curve. The second part is a line sloping upwards from left to right. The third part is parallel to the Y-axis. At high interest rates, speculative demand for money becomes '0'. Even if the interest rate increases further, speculative demand for money remains '0'. This means the speculative demand for money curve merges with the Y-axis. Corresponding to this part of the speculative demand for money, a segment parallel to the Y-axis is formed in the LM curve.

In Figure 4.5, the money market is in equilibrium with an income level of 120 when the interest rate is 6%, and with an income level of 100 when the interest rate is 5%. Points E and F indicate disequilibrium. At point E, $MD > MS$ or $MS < MD$. At point F, $MD < MS$ or $MS > MD$. Due to changes in the interest rate and income, disequilibrium occurred at point E. As shown in Figure 4.5, looking through the downward arrow mark (\downarrow), there is no change in income in equilibrium or disequilibrium. But in disequilibrium, the interest rate decreased. If the interest rate decreases, speculative demand for money increases. Therefore, money demand increases. Since the money supply is constant, due to the increase in money demand, $MD > MS$ or $MS < MD$. To explain this disequilibrium in another way, looking through the arrow mark moving from left to right (\rightarrow), there is no change in the interest rate in equilibrium or disequilibrium. In disequilibrium, income increased. Due to the increase in income, transactional demand for money increases, and thus money demand increases. Therefore, $MD > MS$ or $MS < MD$.

Due to changes in the interest rate and income, disequilibrium occurs at point F. As seen in Figure 125, looking through the upward arrow mark (\uparrow), there is no change in income in equilibrium or disequilibrium. The interest rate increased. Due to the increase in the interest rate, speculative demand for money decreases. If speculative demand for money decreases, money demand decreases. The money supply is constant, and money demand decreases. If the money supply is constant and money demand decreases, $MD < MS$ or $MS > MD$. To explain this disequilibrium in another way, looking through the arrow mark moving from right to left (\leftarrow), there is no change in the interest rate in equilibrium or disequilibrium. Income decreased. Due to the decrease in income, transactional demand for money decreases, and thus money demand decreases. If the money supply is constant and money demand decreases, $MD < MS$ or $MS > MD$.

Any point to the right of the LM curve indicates $MD > MS$ or $MS < MD$. All points to the left of the LM curve indicate $MD < MS$ or $MS > MD$.

Deriving the LM curve using the equation method:

M = Total money demand

MDA = Transactional demand for money

MDP = Speculative demand for money

$MD = MDA + MDP$ (10)

MDP depends on income.

$MDA = M_0 + L_r$ (12)

Here, let's consider M_0 as speculative demand for money when the interest rate is '0', and L as speculative demand for money related to the interest rate.

Substituting equations 11 and 12 into equation (10), we can write it as follows:

$$MD=KY+M0$$

or

$$KY=MD-M0=hr$$

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$$Y=K1(MD-M0)-K1 \text{ hr (13)}$$

The above equation is considered the LM curve equation.

4.5 Comprehensive Equilibrium of Goods Market - Money Market:

The IS curve indicates that goods market equilibrium is possible at various combinations of income and interest rates. Similarly, the LM curve indicates that money market equilibrium is possible at various combinations of income and interest rates. Neither the IS curve nor the LM curve individually can determine the interest rate and the income level at that interest rate. To determine the equilibrium interest rate and income level simultaneously, IS and LM are shown together in Figure 5. The equilibrium of the goods market and money market is possible at the same combination of income and interest rates. That combination is indicated by the intersection point of the IS and LM curves.

Figure 4.6 Comprehensive Equilibrium in Goods Market and Money Market

X-axis - Income

Y-axis - Interest Rate

As shown in Figure 4.6, the goods market and money market are in equilibrium only at the income and interest rate combination Yoro indicated by the intersection point of the IS and LM curves, i.e., $MS=MD=Y=C+L$. Otherwise, at any other combination of income and interest rates indicated by any other point, the two markets will not be in equilibrium. If the goods market is in equilibrium, the money market may not be in equilibrium. If the money market is in equilibrium, the goods market may not be in equilibrium. Or both these markets may not be in equilibrium. All other points on the LM curve, except the intersection point of the IS and LM curves, indicate combinations of income and interest rates where the money market is in equilibrium, and the goods market is in disequilibrium. Similarly, all other points on the IS curve, except the intersection point of the IS and LM curves, indicate combinations of income and interest rates where the goods market is in equilibrium, and the money market is in disequilibrium. All remaining points not on the IS or LM curve indicate disequilibrium in both the money and goods markets.

4.12 Modern Interest Theory

In Figure 4.6, all points not on the IS and LM curves are divided into four parts: I, II, III, and IV. Let's understand how the disequilibrium situation will be at the income and interest rate combinations indicated by the points in these four parts. All points in Part I are to the right of the IS curve and to the left of the LM curve. Therefore, at the income and interest rate combinations indicated by these points, investment is less than savings, and money demand is less than money supply. All points in Part II are to the right of the IS curve and to the right of the LM curve. Therefore, at the income and interest rate combinations they indicate, investment is less than savings, and money demand is greater than money supply. All points

in Part III are to the left of the IS curve and to the right of the LM curve. Therefore, at the income and interest rate combinations they indicate, investment is greater than savings, and money demand is greater than money supply. All points in Part IV are to the left of both the IS and LM curves. Therefore, at the income and interest rate combinations they indicate, investment is greater than savings, and money demand is less than money supply. This equilibrium situation can be written in symbolic form as follows:

Goods Market

I - $I < S(C+I) < Y$: ESG

II - $I < S(C+I) < Y$: ESG

III - $I > S(C+I) > Y$: EDG

IV - $I > S(C+I) > Y$: EDG

Money Market

I - $MD < MS/M > L$: ESM

II - $MD > MS/M < L$: EDM

III - $MD > MS/M < L$: EDM

IV - $MD < MS/M > L$: ESM

ESG: Excess Supply of goods

EDG: Excess demand for goods

ESM: Excess Supply of Money

EDM: Excess demand for money

Deriving Comprehensive Equilibrium using the Equation Method:

The equilibrium of the goods and money markets can be written as follows:

$$Y = k(C_a + I_a) + K_e r \quad (9)$$

$$Y = K_1(MD - M_0) - K_1 h r \quad (13)$$

The above equation can be simplified and written as:

$$K_e r + K_1 h r = K_1(MD - M_0) - K(C_a + I_a)$$

Further simplifying this equation:

$$r(K_e + K_1 h) = K_1(MD - M_0) - K(C_a + I_a) \\ r = \frac{K_1(MD - M_0) - K(C_a + I_a)}{K_e + K_1 h} \quad (14)$$

Now, substituting r into the IS equation:

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$$Y = K(C_a - I_a) + K \left[\frac{1}{K} (M_D - M_0) - \frac{1}{K_e + \frac{1}{K}} \right] \quad (15)$$

Similarly, substituting into the equation:

$$Y = K_1(MD - M_0) - k_1[k_1(MD - M_0) - K(C_a + I_a)K_e + (K_1)n_1] \quad (16)$$

4.7 Changes in the IS Curve:

The IS curve changes due to changes in the investment function, savings function, changes in government expenditure and tax policy, and changes in exports and imports. Here, in the IS-LM model we have elaborated, we have assumed a two-sector economy, so only the investment function and savings function are considered.

Changes in Investment:

Changes in the investment function are a significant factor causing changes in the IS curve. This is shown in Figure 12.7.

Figure 4.7 Change in Investment - Change in IS

4.14 Modern Interest Theory

Part A - Investment Function

Part B - Equality of Savings and Investment

Part C - Savings Function

Part D - Changes in the IS Curve

In Figure 4.7, the investment function is in Part A, the equality of savings and investment is in Part B, the savings function is in Part C, and the IS curve is derived in Part D. In Figure 4.7, we have shown the changes in the IS curve in Part D due to changes in investment in Part A. Initially, in Part A, the investment curve I_r shifts rightward and upward from I_1 to I_2 due to improved business expectations. This means that with the I_1 investment function, at a 6% interest rate, investment is 20, and equilibrium income is 120. When the investment function increases from I_1 to I_2 , investment changes from 20 to 40 at the same interest rate. Then, in Part D, the IS curve shifts from IS_1 to IS_2 . At the same interest rate, income increases from 120 to 160. A rightward shift in the investment function brings a 20 change in investment and a 40 change in income at every interest rate. But in reality, in equilibrium, income increases by only 20 at every interest rate. This is because an increase in income leads to an increase in money demand for daily transactions. This increases the total money demand. However, there is no change in money supply. Therefore, the interest rate increases, investment decreases, and as a result, income decreases. This leads to a new equilibrium indicating a higher interest rate and higher income. If the interest rate had not increased, income would have increased even more. But as mentioned earlier, income affects the interest rate, and the interest rate affects income. Therefore, an increase in investment increases income and increases the interest rate. Hence, a new equilibrium is formed with a higher interest rate and higher income. Similarly, when the investment function shifts leftward and downward, the goods market and money market will be in equilibrium with a lower interest rate and lower income.

Changes in Savings:

Just as changes in the investment function cause changes in the IS curve, changes in the savings function also cause changes in the IS curve.

A decrease in savings shifts the savings curve to the right. Therefore, the IS curve shifts rightward and upward. An increase in savings shifts the savings curve to the left. This causes the IS curve to shift leftward and downward.

4.8. Changes in the LM Curve

The LM curve changes due to changes in money supply and changes in money demand.

Changes in money supply are shown in Figure 4.8.

Figure 4.8 Change in Money Supply - Change in LM

Part A - Speculative Demand for Money Function

Part B - ms

Part C - Transaction Demand for Money Function

Part D - Changes in the LM Curve

In Figure 4.8, changes in speculative demand for money and interest rates are shown in Part A, $ms=md=mt+m_{sp}$ in Part B, transaction demand for money and income in Part C, and changes in the LM curve in Part D. In Part B, due to a change in the money supply curve, the LM curve in Part D has changed. In Part A, when the interest rate is 6%, the speculative demand for money is 40. When the speculative demand for money in Part A is 40, the transaction demand for money in Part B is 60 because $ms = md = 100$. In Part B, when the transaction demand for money is 60, income is 120. In Part D, at a 6% interest rate in Part A, with 120 income from Part C, the equilibrium point is formed where the LM curve intersects IS. This is the first equilibrium point. When the money supply increases from $ms = 100$ to $ms_2 = 120$, $m = md = 120$, but there is no change in the mt curve or the m_{sp} curve. At the same interest rate, income increases by 40, and the money market is in equilibrium. At the same interest rate, there will be no change in the speculative demand for money in Part A. But since $ms = md = mt + m_{sp}$, due to the increase in money supply, the transaction demand for money increases.

(Income) increases. That increases income. Therefore, at the same interest rate, with an increased income of 40, the money market will be in equilibrium. But this is not the comprehensive equilibrium of the goods market and money market. Due to no change in the IS curve, a new equilibrium is formed at a higher income of 140 and a lower interest rate of 5%. This is because for income to increase, investment must increase. For investment to increase, the interest rate must decrease. Therefore, a new equilibrium is formed with increased income and decreased interest rate. Similarly, when money supply decreases, the LM curve shifts leftward from LM to LM3. Here, a new equilibrium is formed with lower income and a higher interest rate.

Change in Money Demand :-

Just as changes in money supply cause changes in the LM curve, changes in money demand also cause changes in the LM curve.

Money demand includes money demand for day-to-day transactions and speculative money demand. When the mt curve shifts rightward, the LM curve shifts rightward. When the mt curve shifts leftward, the LM curve shifts leftward. When the m_{sp} curve shifts upward, the LM curve shifts leftward. When the m_{sp} curve shifts downward, the LM curve shifts rightward.

4.9. Simultaneous Changes in Investment and Money Supply:

Simultaneous changes in investment and money supply are shown in Figure 9.

(Diagram showing IS and LM curves, with X-axis as Income and Y-axis as Interest Rate)

Figure 4.9 Simultaneous Changes in Investment and Money Supply

X-axis - Income

Y-axis - Interest Rate

In Figure 4.9, due to an increase in the investment function, the IS_1 curve shifts to IS_2 . Similarly, due to an increase in money supply, the LM curve shifts from LM_1 to LM_2 . This causes the equilibrium point to shift from an income of 120 and an interest rate of 6% to an income of 160 at the same interest rate (from 120). If money supply remains constant and investment expenditure increases, income increases and raises the interest rate, preventing income from increasing fully. If the money supply is increased enough to control the rise in the interest rate, a complete expansion of income occurs.

4.10. Keynesian Range, Classical Range, Intermediate Range:

The IS-LM model can be divided into three parts:

1. Keynesian Range
2. Classical Range
3. Intermediate Range

These are shown in Figure 4.10. The diagram is divided into three parts.

(Diagram showing Keynesian Range (Part-I), Classical Range (Part-II), Intermediate Range (Part-III) with IS and LM curves, X-axis as Income and Y-axis as Interest Rate)

Keynesian Range:

According to J.R. Hicks, Keynes's "The General Theory of Employment, Interest and Money" is related to economic depression. Therefore, the true Keynesian Range is related to the liquidity trap range. Part - I is referred to as the Keynesian Range. Here, the LM curves we have taken are LM_1 and LM_2 , and the IS curves are IS_1 and IS_2 . Here, even if the money supply increases, there is no change in LM . The reason is that it is the liquidity trap range. Therefore, there is no difference between LM_1 and LM_2 . Even if the money supply is increased without changes in real factors (i.e., factors that shift IS), there is no change in LM and no change in income. This means that monetary policy does not work here. When money supply is kept constant (i.e., no change in LM), and real factors are changed, the IS curve shifts from IS_1 to IS_2 , causing income to increase from Y_1 to Y_2 . This means fiscal policy

works. The situation where monetary policy does not work but fiscal policy works is called the Keynesian Range.

Classical Range :-

Part - II is referred to as the Classical Range. Here, the LM curves we have taken are LM1 & LM2. The IS curves are IS5 & IS6. Let's assume the LM curve is LM1. When the IS curve shifts from IS5 to IS6, there is no change in income. Income is in equilibrium at Y6. However, without change in the IS curve (i.e., taking IS as the IS curve), when the LM curve changes from LM1 to LM2, income increases from Y6 to Y7. This means monetary policy was able to bring about a change in income, but fiscal policy could not. This is called the Classical Range.

Intermediate Range :-

Part III is referred to as the Intermediate Range. This is the part between Part-I and Part II. Here, the IS curves we have taken are IS3 & IS4; the LM curves are LM1 & LM2. Here, IS3 with LM1 has an equilibrium income level of Y3. A change in either IS or LM increases the equilibrium income from Y3 to Y4. A change in both IS and LM, meaning the IS curve shifts from IS3 to IS4 and the LM curve shifts from LM1 to LM2 simultaneously, causes income to increase even more, reaching Y5. In this part, both monetary policy and fiscal policy influence income. A change in either monetary policy or fiscal policy alone increases income only from Y3 to Y4. But if there is a change in both IS and LM, income increases from Y3 to Y5. This means income increases fully. That is, when monetary policy and fiscal policy work together, they have an even greater impact on income.

4.11

Although this modern theory is better than other interest theories, it also has many limitations. Unrealistic assumptions are embedded in the construction of IS and LM curves. For example, consumption and saving depend only on income. Investment depends only on the interest rate. Money supply is constant. Money demand for day-to-day transactions depends only on income. Nevertheless, the modern interest theory is better than the remaining theories. This is because traditional and Keynesian theories cannot precisely determine the interest rate and income levels. The IS-LM model corrected this deficiency and explained the simultaneous equilibrium of goods and money markets.

4.12. Key Terms:

- (1) Consumption Function: The relationship between income and consumption expenditure is called the propensity to consume or the consumption function.
- (2) Saving Function: The saving function describes the direct relationship between income and saving.
- (3) Investment Function: The investment function describes the inverse relationship between investment and the interest rate.
- (4) Money Demand for Day-to-Day Transactions: Demanding money for day-to-day transactions is called money demand for day-to-day transactions.
- (5) Precautionary Money Demand: Some money is needed to face unforeseen circumstances. The money demanded for this purpose is called precautionary money demand.
- (6) Speculative Money Demand: The value of government bonds and securities in the market changes. The demand for money to buy and sell bonds with the intention of buying them

when their value is low and selling them when their value is high to make a profit is called speculative money demand.

(7) Liquidity trap: If the interest rate falls below a certain level, even if the money supply is increased, the interest rate will not fall further. This is called a liquidity trap.

(8) Speculative Money Demand Function: The speculative money demand function describes the inverse relationship between speculative money demand and the interest rate.

(9) Monetary Policy: The policy used by the central bank to control the money supply and achieve the economic goals of the economy is called monetary policy.

(10) Fiscal Policy: Influencing income, output, employment, and price levels through government expenditure, tax, and debt policies is called fiscal policy.

4.13 Self-Assessment Questions:

(1) Explain the Modern Interest Theory (or) IS-LM Model (or) Integrated Model of Real and Monetary Sectors (or) Hicks-Hansen Model?

(2) Explain the equilibrium of the goods market and the money market?

(3) State the factors that cause a change in the IS curve.

(4) State the factors that cause a change in the LM curve?

(5) Explain the Keynesian Range, Classical Range, and Intermediate Range.

4.14 Books to Read:

1. Edward Shapiro, 1994, Macro Economic Analysis Fifth Edition, Galgotia Publications (P) Ltd, New Delhi.
2. Dornbusch, Fischer and Startz, 2002, Macroeconomics, Third Edition, McGraw-Hill, New Delhi.

Lesson - 5

BANKING - FINANCIAL SYSTEMS

(Objectives):

In this lesson, you will learn about the origin and history of banking, the development of banks, types of banks, functions of commercial banks, and understanding the nature and trends of banking.

Topics:

5.1 Banking - Origin and History

5.2 Definition of Bank

5.3 Development of Banks

5.4 Types of Banks

5.5 Functions of Commercial Banks

5.6 Development Banks - Functions

5.7 Types of Cooperative Banks

5.8 Banking Financial Systems

5.9 Banking Trends - Nature

5.10 Questions to Know

5.11 Glossary

Banking - Origin and History (Banking origin):

The banking business has existed in the world since ancient times. It can be said to be a unique business. Manufacturing firms produce goods and earn profits by selling them. However, banks are institutions whose commodity for business is money or currency. Banks are institutions that accept money from savers and provide that money to the public in the form of investments and loans to earn profits. That is why R.S. Sayers compared banks to institutions that do business with money and earn profits. If the only job of banks was to transfer money from one person to another, we would not be so interested in them. Banks create money by mobilizing dormant savings and granting loans to productive firms and individuals. Due to their power to create money, banks can influence production and price levels.

Historical evidence suggests that banking has existed in various forms in different countries around the world since ancient times. A developed banking system was in operation in

Babylonia as early as 2000 BC. Extensive credit facilities were available in ancient Greece and Rome. Some banks were formed on their own, while others were established by the government to collect taxes. In India too, the banking system has been in practice since Vedic times, as known from "Manu Nyayashastra" (Manu's Law). Manu, in his book, extensively described legal transactions related to credit, banking loans, interest, commercial papers, and other regulations. However, in reality, banking in those days meant only lending, and the complex banking system currently in operation did not exist.

The word 'bank' first came into use in the Middle Ages when the Bank of Venice was started in Italy. In 1157 AD, the Bank of Venice took shape as a public sector institution. At that time, most of Italy was dominated by Germans. In 1174 AD, when the Venetian government was deeply involved in war, it needed money and borrowed it at interest from the public. This common fund was called 'Monte' in Italian. Its equivalent in German was 'Bank'. Due to German dominance, this word came into use. In Italian, it is called 'Banco'. In French, it became 'Banke'. In English, 'Banke' evolved into 'Bank'. In modern times, the banking business can be said to have started first in Barcelona in 1349. There, banks conducted their activities under government control. Banks there handled transactions such as domestic and foreign currency exchange, deposit collection, and discounting of bills. In 1407, the "Bank of Genoa" was started. In 1609, the "Bank of Amsterdam" was started. This bank accepted all types of deposits.

According to Crowther, the emergence of modern banks can be attributed to three reasons:

1. Merchant Bankers: These were primarily merchants. They accepted money safely entrusted to them by customers and issued papers equivalent to their value. People accepted these papers. They were useful in transferring customer's money from one place to another. The efforts of merchant bankers during the formation of the modern banking system are commendable.
2. Money Lenders: These individuals lent their surplus money to others at interest. Goldsmiths, comparing the money their customers deposited with them daily and the money they withdrew, found that the withdrawals were not more than the deposits. With this, they realized they could conduct business with a small minimum reserve, thus initiating the modern banking system.
3. Goldsmiths: These individuals safely kept valuable gold and silver ornaments belonging to their customers and issued receipts equivalent to their value. They played a prominent role in developing the London banking system. In those days, money meant only gold and silver coins. Customers traded with the receipts issued by these goldsmiths. In buying and selling goods, customers exchanged goldsmiths' papers with warehouse receipts to conduct business transactions.

Even today, the above three characteristics are clearly visible in modern banks. Today's bankers lend to customers like merchants. They do business like money lenders. Like goldsmiths, they accept gold ornaments and securities as collateral for loans. The Bank of England, established in 1694, can be considered the beginning of the modern banking system. Although the banking system has been in practice since ancient times, its form, nature, and characteristics have undergone many changes in accordance with changing social, economic, and political conditions.

5.3 Definition of Bank

Banks are financial institutions that greatly assist the economic progress of a country. In the modern economic system, they contribute immensely to the development of trade, commerce, and industries. Banks are the pillars of a nation's prosperity, economic progress, and welfare.

They provide many types of functions and services. In accordance with the changing social system, the banking system is constantly undergoing changes.

Therefore, it is very difficult to comprehensively define a bank and banking. Many scientists have given various definitions. Some of them are explained below.

1. According to Dr. Herbert L. Heart: "A person who, in the ordinary course of business, receives money from individuals for deposit into their current accounts and honors checks issued by those individuals, can be called a banker." According to this definition, an institution that accepts current deposits and honors checks issued against those deposits becomes a banking institution.
2. According to Sir John Paget: "Receiving various types of deposits, paying checks on them, and collecting crossed or uncrossed checks on behalf of customers are the essential duties of a banker." One who does not perform this collection cannot be called a banker.
3. According to R.S. Sayers: "An institution whose deposits are used by its customers for the collection and payment of loans is called a bank." Section 5 (b) of the Banking Regulation Act defines banking as follows: "Accepting deposits from customers on the condition that they will be repaid on demand by check, draft, or any other document, and using that money for giving loans or for investment, is called banking business." Broadly speaking, a bank has the following characteristics:
 - a) It accepts money in the form of deposits and provides it in the form of loans to those in need.
 - b) It creates credit. By introducing the check system, it converts deposits into cash and transfers them between individuals.
 - c) It acts as an aid for creating demand deposits and for payment exchange. It conducts business transactions to earn profits.

5.4 Development of Banks (Banks' Growth):

Banking business has existed in India since ancient times. Kautilya's Arthashastra explains how interest rates should be levied on various loans. Indigenous bankers accepted deposits from the public. They arranged to send money from one place to another through Hundis. Large Marwaris conducted large-scale banking business. They had offices in some cities. The British introduced a single currency in our country. This laid the foundation for the development of our banking system with proper modern methods. Commercial banks first emerged in Britain. Even today, Britain is the birthplace of the banking system. In our country, the first bank, "Hindustan Bank," was established in 1770. It was closed in 1832 due to lack of proper business. With the law passed in 1860 allowing the establishment of banks with limited liability, the progress of the banking system can be said to have begun from that time.

For European traders, British agency houses had already established some banks in our country. Banks were established in Calcutta, Madras, and Bombay. These were called "Presidency Banks." The East India Company supported these banks. These banks also established branches in other countries. These three Presidency Banks merged in 1920 to become the Imperial Bank of India. This bank later became the State Bank of India in 1955. In our country, the Swadeshi movement began during that period, leading to the establishment and development of many indigenous banks. However, between 1913 and

1939, many banks in our country collapsed and closed down. Low capital, inexperienced management, and the absence of a central bank in the country were the reasons for this collapse.

The Second World War (1939-45) had a significant impact on banking development in our country. The number of banks and branches increased significantly. Due to war needs, more money came into circulation in the country. Banks also created more money. Bank deposits increased. Investments and loans increased. After India gained independence in 1947, the central government took measures to consolidate banking development. The Reserve Bank, established in 1935, was nationalized in 1949. The Indian Banking Companies Act was introduced in 1949. This act brought a new development in the banking business in our country. As a result, the Reserve Bank was given more powers, and many regulations were imposed on other banks.

The Indian government nationalized the Imperial Bank (and its subsidiary banks) in 1955, establishing it as the State Bank of India. This brought one-third of the country's commercial banking under government control. The amendment of the RBI Act in 1956, the nationalization of 14 commercial banks in 1969, and 6 banks in 1980 brought revolutionary changes in the country's banking system.

Consequently, 90% of the country's resources came into public sector banks. From then on, bank deposits began to increase. Branch expansion occurred on a large scale. Banks have played a commendable role in terms of size, expansion, and development.

5.5 Types of Banks (Types of Banks):

Many types of banks operate in every country. Each type of bank performs specific functions. Based on the functions performed by banks, it is decided which category they belong to. As in all sectors, there is specialization in banks as well. Banks can be classified as follows based on the functions they perform:

1. Central Banks
2. Commercial Banks
3. Development Banks
4. Cooperative Banks
5. Central Banks: There is a central bank to control and regulate the banking system in a country. Every country has a central bank. The Bank of England in England, the Bank of France in France, and the Reserve Bank of India in our country are central banks. Initially, central banks started under private ownership, but gradually, central banks in many countries are being managed under government ownership. A central bank is a financial institution that maintains an appropriate currency system for the country, promotes the banking structure within the country, and regulates it. The central bank occupies a key position in the country's economic system and money market. That is why central banks in many countries have been nationalized. Central banks do not operate for profit like commercial banks. The objective of a central bank is to create monetary and financial stability in the country and promote national prosperity. Depending on the differences in the economic progress and economic system of various countries, there are differences in the functions to be performed by central banks in different countries, the policies they adopt, and the methods they follow. However, the main functions performed by all central banks are the same.

Functions of Central Bank:

Central banks in every country are established for the performance of certain specific functions. Generally, central banks do not perform the functions performed by commercial banks. Central banks take necessary measures for the progress of the country and the welfare of the people. Recently, many changes have occurred in the functions of central banking. Previously, the central bank undertook monetary functions. However, currently, in line with changing objectives, striving for national development is becoming their primary function. The functions performed by the central bank are listed below:

1. Issuing currency notes
2. Acting as a banker, agent, and advisor to the government
3. Acting as a banker to banks
4. Controlling the credit created by banks
5. Protecting the country's metallic reserves and foreign exchange reserves
6. Acting as the lender of last resort
7. Implementing government monetary policy

Banking and Financial Systems

Banking Financial Systems

2. Commercial Banks: Banks and financial institutions are the foundation of a country's economic progress. In the modern economic system, banks play a prominent role. They contribute greatly to national prosperity and economic progress. According to Sayers, "An institution whose deposits are used by its customers for the collection and payment of loans is called a bank." According to the Banking Regulation Act, "Accepting deposits from customers on the condition that they will be repaid on demand by check, draft, or any other document, and using that money for giving loans or for investment, is called banking business."

Broadly speaking, a bank has the following characteristics:

1. It accepts money in the form of deposits and provides it in the form of loans to those in need.
2. It creates credit. By introducing the check system, it converts deposits into cash and transfers them between individuals.
3. It is a commercial organization established with the aim of earning profits.
4. It acts as an aid for creating demand deposits and for payment exchange.

The functions performed by commercial banks can be broadly divided into two types: 1) Primary Functions, and 2) Subsidiary Functions and Services.

1. Primary Functions: Accepting deposits from the public, providing loans to those in need, and creating money are the primary functions of banks. These are explained below:
 - (a) Accepting Deposits: Banks accept surplus money from the public and traders in the form of deposits and then lend that money in the form of credit to individuals or organizations in need at a higher interest rate, thereby earning a profit. Banks operate various types of deposit accounts to collect deposits from all sections of society according to their capacity and needs. Various types of deposits are as follows:
 1. Fixed Deposits

2. Current Deposits
3. Savings Deposits
4. Recurring Deposits
5. Home Safe Deposits

(b) Granting Loans: The second most important function of a banker is to provide loans or advances to individuals or organizations in need. Every bank, after depositing the minimum reserve with the Reserve Bank, provides the remaining amount in the form of loans. Various types of loans provided by banks are as follows:

1. Call Money Loan
2. Cash Credit
3. Overdraft
4. Discounting of Bills
5. Term Loans
6. Subsidiary Functions, Services: Banks provide these services, which can be divided into two types: 1. Agency Functions, and 2. General Utility Functions, which are explained below.
 1. Agency Functions: These services arise from the performance of the primary functions of banks. While performing these services, banks act as representatives of their account holders. Agency functions are as follows:
 - Banks act as agents, correspondents, and representatives on behalf of account holders.
 - If account holders instruct banks to pay insurance premiums, club subscriptions, telephone bills, etc., at specified times, banks pay them at those times.
 - Buying and selling securities.
 - Executing orders issued by account holders.
 - Preparing income tax plans for their account holders.
 - Collecting and paying on credit instruments on behalf of account holders.
 2. General Utility Functions: In addition to agency functions, commercial banks also perform the following general utility functions for their customers:
 - Providing safe deposit locker facilities for safekeeping valuable items, ornaments, and documents.
 - Providing traveler's checks and draft facilities to avoid fear of theft when traveling to distant places.
 - Issuing letters of credit for the development of foreign trade.
 - Banks collecting various fees for business development.
 - Banks undertaking responsibility for underwriting securities issued by various companies, etc.

Development Banks: Development banks were established with the objective of providing long-term financial assistance to industries. Industries require fixed capital for the acquisition

of fixed assets and working capital for day-to-day operations. Commercial banks generally provide only short-term working capital. Development banks grant the necessary fixed capital to industries on a long-term basis. In addition, development banks perform functions such as undertaking the preparation of project reports, providing technical advice, and management services. Primarily, a financial institution that provides medium-term and long-term credit is called a development bank.

According to Professor William Diamond, "An institution that primarily strives to provide long-term debt capital is called a development bank. An institution that, in addition to providing financial assistance and equity capital, specifically works on the management and development of companies is called a development corporation." Development banks have been established in economically underdeveloped and developing countries for industrial development and to provide financial and non-financial facilities.

Functions of Development Banks: The main objective of development banks is to provide necessary financial and non-financial facilities for industrial development. In addition to providing medium-term and long-term funds required by industries, development banks perform 2.5 functions. These functions are described below.

1. Providing medium-term and long-term loans to industrial organizations.
2. Providing underwriting for the issue of shares, debentures, and bonds of industrial organizations.
3. All development banks provide various types of guarantees to industrial organizations.
4. Along with underwriting, development banks purchase shares and debentures of industrial organizations through subscription and direct investment.
5. Promoting new industries, providing technical, managerial, and administrative advice.
6. Promoting export industries, supervising and developing sick industries.

In India, modern development banks were established only after independence. The important development banks established are listed below:

- Industrial Finance Corporation of India
- Industrial Credit and Investment Corporation of India
- Industrial Development Bank of India
- State Financial Corporations
- Export-Import Bank of India
- Unit Trust of India
- Life Insurance Corporation of India
- National Bank for Agriculture and Rural Development
- Small Industries Development Bank of India

Various development banks operating at national and state levels have significantly provided financial and non-financial assistance to various industries in the country for the past 50 years.

4. Cooperative Banks: In India, most rural people have adopted agriculture as their main occupation. Even though agriculture is their main occupation, farmers live in poverty. The

reason for this is the lack of adequate financial assistance for farmers. For the development of agriculture, farmers need money for agricultural work, and they used to have to approach moneylenders for the necessary financial assistance. To save farmers from the clutches of moneylenders, the government undertook to solve the financial problems of farmers through the instrument of "cooperative credit." The government implemented the Cooperative Credit Act in 1904. This strengthened the cooperative movement, and cooperative societies and cooperative banks were established. "Providing financial assistance to farmers and spreading cooperative principles and savings are the main objectives of this cooperative movement." Another act came into force in 1912 with some changes. Through the new act that came into force in 1919, the cooperative department was transferred from the central government to the state governments. Committees such as the Rural Credit Survey Committee and the All India Rural Banking Enquiry Committee thoroughly examined cooperative problems and made many recommendations. As a result, primary cooperative banks, central cooperative banks, and state cooperative banks were established.

Types of Cooperative Banks: Cooperative banks in India can be classified into three types: 1. Primary Cooperative Banks, 2. District Central Cooperative Banks, and 3. State Cooperative Banks.

1. Primary Cooperative Banks:

Primary cooperative banks were established with cooperative principles to provide financial assistance for agricultural activities to farmers in villages. Primary cooperative banks can be formed by individuals belonging to a village or region. Only individuals from that region are eligible to become members of this bank. The loan liability of bank members is limited. In some areas, members pay share capital - no member should buy shares beyond a prescribed number. Regardless of how many shares a member has, they only have one vote. They cannot transfer shares to others. Members elect the executive committee every year. Funds for this bank are raised in various ways. The bank collects the necessary funds through entry fees, share capital, deposits, loans, etc. Primary cooperative banks provide loans only to their members. There is a limit to the loans members can obtain from these banks. These banks keep their reserve funds in district central cooperative banks. When their funds are insufficient, these banks take loans from the central cooperative bank and from the government. All these banks are affiliated with the central cooperative bank.

2. District Central Cooperative Banks:

Each district has a central cooperative bank. All primary cooperative banks in the district are affiliated with it. Primary cooperative banks and other individuals are members of this bank. These banks raise their necessary funds through members' share capital, reserve funds, deposits, and loans from state banks and commercial banks. The state cooperative bank also provides financial assistance to these district banks. Primary cooperative banks deposit their surplus funds in the central cooperative bank. The main duty of central cooperative banks is to provide financial assistance to primary cooperative banks, advise them to operate properly, and coordinate their activities. District central cooperative banks invest their surplus funds in government securities.

3. State Cooperative Banks:

Each state has a state cooperative bank. All central cooperative banks are members of this bank. Individuals can also be members. The funds of the state cooperative bank come from district central cooperative banks, individuals, commercial banks, and the Reserve Bank in

the form of loans. This bank also raises funds through deposits. The state cooperative bank provides financial assistance to district central cooperative banks and thereby to primary cooperative banks. The operations of state cooperative banks continue in accordance with general business principles and the spirit of the cooperative movement.

The Indian State Cooperative Banks Federation coordinates the activities of state cooperative banks. It provides necessary information and financial requirements to the banks. The cooperative credit movement has stabilized in the country. It assists farmers and other people in many ways. The development of cooperative credit banks has been very rapid. These banks have been able to understand rural conditions and problems. They are able to meet the needs of farmers to some extent. Small farmers have escaped the clutches of moneylenders by obtaining short-term and medium-term loans at low interest rates. Cooperative banks have developed due to the special interest shown by the Reserve Bank in the rural credit sector.

In India, 29 state cooperative banks were operating by the year 2000, providing loans amounting to approximately Rs. 34,552 crores. By the year 2000, 367 district central cooperative banks were operating, providing loans amounting to approximately Rs. 39,367 crores. By March 1999, the number of primary cooperative banks in the country was registered as 92,450. In that year, these banks provided credit of approximately Rs. 16,081 crores. They are spread across 96% of rural areas and have a membership of 10.16 crores. Cooperative banks make immense efforts to develop the rural agricultural sector in India. The cooperative sector can be described as an excellent development factor for farmers. Cooperative banks offer many benefits - cheap rural credit can be obtained. Cooperative banks are striving to provide productive loans to farmers as an alternative credit.

5. (Nature and trends in Banking):

After independence, the establishment of the Planning Commission in our country guided commercial banks in the right direction. Many structural changes have taken place in the Indian banking system. Banks are the pillars of the country's economy. Banks have to formulate their policies based on the country's political, economic, and social conditions. Remarkable and surprising changes have occurred in the outlook, methods, and policies of banks. After the nationalization of banks, revolutionary changes came in the Indian banking system. Banks are contributing to the country's economic development by providing loans and guarantees to agriculture and industries in accordance with national plans, showing courage. In the last two decades, banks have abandoned the old banking policies previously followed and implemented new innovative banking policies for the economic and social upliftment of rural people in the country and for the overall development of the nation.

Once upon a time, banks were located in cities. Now they have expanded into rural areas as well. Once upon a time, landlords, big businessmen, and industrialists conducted transactions in banks. Now, poor farmers, small businessmen, and people from various professions are conducting transactions with banks. Currently, banks are coming to the people. That is why the Indian banking system has been described as having changed from a Class Banking system to a Mass Banking system. The entire banking policy has been restructured to achieve social objectives. The nature of new developments that have occurred in the Indian banking system in recent times is described below.

1. Overall Growth of Bank Branches: The number of bank branches in the country has increased phenomenally. By 2000, the total number of scheduled banks was 299, and their branches were registered as 65,340. The number of branches in rural areas increased significantly after 1969. About 60% of the branches are located in rural areas.

2. Increase in Deposits: Banks have collected a lot of money from the public in the form of deposits. While deposits were Rs. 327,686 crores in June 1994, they increased to Rs. 8,10,070 crores by the year 2000. More deposits were available in rural areas than in urban areas. Economic development, deficit financing, abundant currency, and increased banking facilities can be attributed to this large-scale deposit collection.

3. Credit Expansion: The credit expansion provided by banks continues to increase every year. While total loans were Rs. 3020 crores in 1969, bank loans increased to Rs. 4,21,479 crores by the year 2000. Significantly, bank loans have been provided to agriculture, small-scale industries, and other priority sectors. Bank loans to priority sectors, which were 12% in 1969, increased to 42% by the year 2000.

4. Shift from Urban to Rural Areas: After the nationalization of banks, banks undertook a large-scale branch expansion program in rural areas. Through the Lead Bank Scheme introduced by banks, the number of rural branches increased significantly. While there were 1832 branches in rural areas in 1969, this number increased to 32,771 by 2000. Although the number of branches in urban areas and cities also increased during the same period, it was very low compared to the increase in branches in rural areas. At the time of nationalization, banking facilities were concentrated only in a few developed states, and were very low in other states. Therefore, regional disparities were high. In the later period, there was a significant change in branch expansion. This is a positive development.

5. Services from Large Account Holders to Small Account Holders: Once upon a time, opening a bank account was a special privilege and facility only for the wealthy. The majority of people had no knowledge of or opportunity to open a bank account. But today, even the common man has reached the stage of opening a bank account. About 60% of the depositors in commercial banks today are savings bank account holders. This includes everyone from office peons to farmers and big businessmen. In the last 20 years, there has been a lot of development in savings bank accounts. Banks have recognized the saving capacity of people in rural areas. Banks have shifted their focus towards small account holders. As part of this, savings bank conditions have been simplified. In addition, in the industrial sector, banks have shifted their focus from large industries to small-scale and cottage industries. Accordingly, loans are being granted generously to small businessmen at low interest rates. Currently, banks are providing extensive loans not only to big businessmen but also to the poor, small businessmen, employees, farmers, professionals, artists, and youth trying for self-employment. In particular, in 1972, banks introduced the Differential Interest Rate Scheme for weaker sections. Under this, loans are provided at a very low interest rate (4%).

6. Development Banking: In the past, banks used to provide short-term loans only to industries like cotton, textile, and jute. They did not agree to provide loan assistance to new industries and commercial sectors - but in recent times, banks have abandoned traditional methods and are adopting new approaches. Banks have shifted their focus from the old methods based on accepting deposits and giving loans to development schemes. Currently, banks are providing large amounts of loan assistance to the industrial and agricultural sectors and contributing to the development of those sectors. Gradually, they are also providing medium-term and long-term loans required for industries and agriculture. Therefore, commercial banks are recently being called development banks.

The old methods of banking have shifted their focus to development schemes. Currently, banks are providing large amounts of loan assistance to the industrial and agricultural sectors and contributing to the development of those sectors. Gradually, they are also providing medium-term and long-term loans required for industries and agriculture. Therefore, commercial banks are recently being called development banks.

7. **Strengthening of the Banking System:** The responsibilities of the banking system are increasing day by day. Therefore, there was also a need to legalize and control the banking system. In 1949, a special "Banking Regulation Act" was formulated for banks. This act gave extensive powers to the Reserve Bank regarding the control, supervision, and regulation of various banks. Measures were taken to close small banks through compulsory merger. This allows small banks to merge with large banks, strengthening the banking system. In our country, the nationalized New Bank of India merged with Punjab National Bank. Similarly, some private banks are being merged into public banks.

8. **Focus on Priority Sectors:** After the nationalization of banks, revolutionary changes occurred in the banking credit policy regarding financial assistance to priority sectors. Sectors such as agriculture, small-scale business, and export business gained recognition as priority sectors. Through various newly introduced methods, those who take small amounts of loans have gained access to bank loans. These loans are provided at very low interest rates. While the total loan assistance provided by banks to priority sectors was Rs. 504 crores in 1969, by the year 2000, banks provided approximately Rs. 1,35,923 crores to these sectors. In 1969, 12% of total loans were given to priority sectors, which increased to 42% by 2000. Banks are generously providing financial assistance for house construction to people belonging to Scheduled Castes, Tribes, and other weaker sections.

9. **Integrated Rural Development:** For the past few years, banks have recognized social objectives and are making significant efforts for rural development and poverty eradication. Banks are sincerely playing their part in the "Integrated Rural Development Program (IRDP)" launched by the Government of India on a large scale in 1978 for poverty eradication. Under this program, banks are implementing many types of loan schemes to help rural families below the poverty line. Banks are making great efforts with the objective of comprehensive rural development. This is very gratifying.

10. **Innovation Banking:** The banking system is currently operating with innovation. Banks in our country are currently implementing modern methods adopted from technical knowledge, computer knowledge, and foreign banks. This leads to a decline in the quality of deposit collection, credit distribution, and management. Innovation can enable faster, more accurate, and satisfactory services to customers. Innovation is very useful for banks in collecting large amounts of deposits from the public, as well as in providing loans to various sectors through modern methods, and in providing excellent services to customers. Especially, bank staff participate in management with good efficiency and intelligence. Moreover, with competition prevailing among banks, banks have recently been giving high priority to quality in services.

11. **Merchant Banking:** Merchant banking is an activity that commercial banks have been increasingly inclined towards recently. As early as 1972, the Banking Commission emphasized the necessity of merchant banking. Merchant bankers provide financial assistance to middle-class and small investors and offer the following services: loan syndication, financial management advice, project advice, portfolio management, designing rehabilitation schemes, and providing advice for foreign trade loans, etc. State Bank of India was the first in the country to initiate these services. Subsequently, almost all commercial banks in the country are providing the above-mentioned services.

In the last 20 years, the Indian banking system has achieved significant progress. It has introduced many new methods and schemes. "High aspiration, purposeful progress" can be said to be the characteristic of our commercial banks today. Based on the above points, it can be said that banks have undertaken revolutionary changes in recent times, and as a result, the performance of banks has greatly improved both quantitatively and qualitatively.

Self Assessment Questions

1. Explain the origins of banking.

2. Define a bank and explain how banks have developed.
3. Elaborate on the types of banks.
4. Explain the functions of commercial banks with examples.
5. Explain the cooperative banking system and its functions.
6. Write about recent trends in banking.

Glossary:

1. Bank: An institution that accepts deposits from the public on the condition of repaying them on demand or at another time, through checks, drafts, or orders, and uses that money for lending or investing.
2. Current Deposit Account: This account generally offers the facility to deposit and withdraw money from the bank many times every day. Banks usually do not pay interest on the balances in these accounts.
3. Industrial Banks: Banks specifically established with the objective of providing financial assistance to industries are called industrial banks or investment banks. These are also called development banks. For example, Industrial Finance Corporation of India, Industrial Development Bank of India can be called industrial banks.
4. Savings Banks: The objective of savings banks is to promote savings among the people. It is more appropriate to call them savings centers than banks. In areas where there are no banks, post offices open savings accounts and provide extensive services to the public. They also promote savings in the country.

Lesson -6

BANKING SYSTEMS

(Objectives)

In this lesson, we will learn about the types of banking systems existing in the world.

Understand the advantages and disadvantages of unit banking and branch banking.

Understand other banking systems such as group banking, correspondent banking, chain banking, and mixed banking.

Understand recent trends.

Aspects

6.1 Banking Systems

6.2 Branch Banking Unit Banking

6.3 Differences between Branch Banking and Unit Banking

6.4 Advantages of Branch Banking

6.5 Disadvantages of Branch Banking

6.6 Advantages and Disadvantages of Unit Banking

6.7 Suitable System for India - Branch Banking

6.8 Group Banking

6.9 Correspondent Banking

6.10 Chain Banking

6.11 Mixed Banking

6.12 Recent Trends

6.13 Self-Assessment Questions Glossary.

61. Banking Systems:

The nature and characteristics of banking systems are not uniform across all countries. It is undeniable that the nature and characteristics of banking vary from country to country. The structure of a country's banking system depends on its economic conditions, political traditions, and customs of the people. Banking systems in operation in various countries can be classified into different types. These are Branch Banking, Unit Banking, Group Banking,

Correspondent Banking, Chain Banking, and Mixed Banking. However, among the banking systems mentioned above, Branch Banking and Unit Banking are prominently in practice.

6.3. Branch Banking - Unit Banking Branch Banking:

If a banking institution in a country has branches in many areas and conducts banking business, that method is called branch banking. In this method, the bank has a central office in one place and many branches spread across the country, state, or even abroad. All these are managed by a single management. All branches operate under the control of the central office. For example, State Bank of India has approximately 9000 branches across the country. Its central office is in Mumbai.

England is famous for branch banking. The main objective of branch banking is to have a single board of directors, shareholders belonging to a group, legal personality, and to expand branches throughout the country to conduct banking activities. The branch banking method originated in England and developed in countries like Canada, Australia, and India. The entire banking business in England is concentrated in the hands of just five large banks: The Midland Bank, The Lloyds Bank, The Barclays Bank, The Westminster Bank, and The National Provincial Bank. In this system, each bank has a central office and branch offices spread across the country.

Unit Banking: If a bank operates banking business in a single location without branches, that method is called unit banking. Each bank has only one office. That bank does not have branches. This banking system is in operation in America. Each bank has separate shareholders and managing officers. The business of each bank is limited to a specific area. This method has special importance in America. In that country, small banks operate in limited areas. According to the American constitution, central and state governments can enact banking laws. Banks established according to central law are called national banks, and banks established according to state law are called state banks. National banks are not allowed to have branches. Some states permit branches to open in that state. Therefore, some banks in some states have branches. However, even though banks in America have only one office, they maintain close relationships with each other through the 'correspondent method'. According to Shapiro, Solomon, and Wild, "A bank that operates business transactions with a single office, in a single location, without relations with other banks, and with total management and control under a single corporation, is called a unit bank." A prominent feature of the American financial system is that instead of a single central bank, there are 12 Federal Reserve Banks. Through the correspondent method, all banks in the country are connected to banks in New York and Chicago. This method facilitates the collection of checks and the transfer of money from one place to another.

6.4. Differences between Branch Banking and Unit Banking:

Branch banking should be described as a large-scale organization, and unit banking as a small-scale organization. A branch bank has many branches across the country. It has more capital. It can achieve large-scale business and obtain the benefits that accrue to a large-scale organization. A unit bank generally has only one branch. It has less capital. It is a small business organization. Therefore, Sayers stated that the advantages and disadvantages of branch banking and unit banking are similar to the advantages and disadvantages of large-scale and small-scale business organizations.

6.5. Advantages of Branch Banking:

The following advantages accrue from the branch banking system.

1. **Fund Mobilization:** Branch banking allows banks to mobilize funds on a large scale. Since branches are spread across the country, it is possible to promote savings habits among the public and collect large amounts of deposits. This facilitates capital formation in the country.
2. **Division of Labor:** Branch banking is like a large-scale business. By dividing activities in banks, highly paid and trained employees can be appointed, and benefits can be obtained by introducing division of labor. When skilled individuals perform tasks, results are completed quickly, and efficiency increases.
3. **Fund Transfer:** When business transactions are active, cash needs to be transferred from one region to another. Since branch banking is spread across the country, it is easy to transfer large sums to distant places at low cost. Branch banking reduces cost and saves time.
4. **Loss-Bearing Capacity:** Branch banking reduces the risk of loss and increases the capacity to bear losses. If some branches incur losses, they can be adjusted with the profits from other branches. In the branch banking system, if deposits are available from regions with high savings, these can be disbursed as credit to regions needing loans.
5. **Fund Savings:** In the branch banking system, business can be conducted without large cash reserves. If necessary, reserves from one branch can be transferred to another. It is possible to keep necessary reserves in branches and lend larger amounts.
6. **Managerial Efficiency:** Branch banks can achieve high efficiency in management. By appointing efficient and expert officers, tasks can be performed efficiently and completed quickly. In this context, staff are trained.
7. **Economies of Scale:** In the branch banking system, banks conduct business on a large scale. Therefore, it is possible to reduce operating costs and provide more services to customers at lower cost. By scientific management and reducing administrative costs, profits increase.
8. **Ease of Supervision:** Although branches are spread across the country, their control is entirely in the hands of the central office. Therefore, it is sufficient for the central office and the central bank, i.e., the Reserve Bank, to supervise and control them. The central bank has full control over those banks.
9. **Absence of Local Pressures:** Branch banks can continue their policies without being subject to local pressures. Loans can be sanctioned based on the borrower's loan, financial strength, and capacity.
10. **Staff Promotions:** Branch banking has many branches. Therefore, staff have opportunities for transfers and quick promotions. This increases managerial efficiency. Promoted employees are satisfied and work with dedication for the development of banks.
11. **Rural Development:** Under this method, by establishing bank branches in remote villages and backward areas, those areas develop. Many banking services can also be provided in rural areas.
12. **Confidence in the System:** In the branch banking system, branches are spread across the country, leading to high volume of business. Even if some branches are in loss, the bank's credit is not harmed. People have full confidence in the bank. Based on this confidence, people deposit their money in banks.

16. Disadvantages of Branch Banking:

The branch banking system has the following drawbacks:

1. **Delay in Banking Transactions:** The branch manager does not have the authority to make independent decisions in all matters. In some matters, the central office needs to be consulted and approval obtained. There may be delays in obtaining this approval. However, in these days of widespread telephone and telegraph facilities, this drawback can be easily overcome.
2. **Supervisory Defect:** Due to the large number of branches, bank management supervision is somewhat difficult. Many branches are far from the central office. Therefore, supervision may not be very effective. The branch manager may misuse funds and engage in corruption.
3. **Costly:** The branch banking system is costly. As branches are established, their establishment costs, staff, operational, and other expenses keep increasing. Due to the lack of initiative from some branch managers, the losses incurred are covered by the profits of other branches, ultimately resulting in little profit.
4. **Limited Personal Contact:** Branch managers are frequently transferred from one region to another. Therefore, there is no opportunity for direct contact with local customers or to study their qualities and personalities. This limits the ability to collect deposits on a large scale. Moreover, they do not show much interest in understanding local problems or which sectors to lend to for the development of that area.
5. **Intense Competition:** Various banks may establish their branches in the same area. This can lead to intense and undesirable competition among them. As a result of intense competition, undesirable situations such as reduction in interest rates on loans and higher interest on deposits may arise. While this benefits a few, the nation as a whole has to pay a heavy price.
6. **Coordination Problem among Branches:** As the number of bank branches increases, achieving coordination among them becomes difficult. It becomes difficult to apply bank policies, methods, and rules and regulations uniformly. For example, State Bank of India faces many problems in achieving coordination among its branches and implementing banking policies.
7. **Loss due to Bank Failure:** The loss incurred when a unit bank goes bankrupt is limited. However, the loss incurred when banks with branches in various parts of the country go bankrupt is much greater. There is a risk of people losing faith in banks. This causes great loss to society and the country, and branches in rural areas that only provide loans but cannot collect deposits cause losses to the bank.
8. **Transfer of Deposits:** Deposits made by people of a region in bank branches are transferred to other regions. Therefore, the resources collected in that region are not utilized for the development of that region.

Telugu to English Translation of Banking Concepts

Unit Banking - Advantages (17 యూనిట్ బాంకింగ్ వల్ల ప్రయోజనాలు)

1. **Personal Relationships with Customers:** Unit banks have a very limited scope of business. Therefore, they maintain personal relationships with customers. They understand the individual financial capacity of their customers and can quickly resolve local problems by providing credit and loan assistance.
2. **Attention to Local Needs:** Unit banks are established locally and contribute to local development. They pay special attention to local needs. They strive for the

development of the region by focusing on allocating funds based on local resources, development opportunities, and problems.

3. **Skilled Credit:** Bank staff have close relationships with the local people. Therefore, they know the creditworthiness, financial capacity, repayment ability, and personal qualities of the customers. They can implement a proper credit policy and reduce their outstanding debts.
4. **Management Efficiency:** The operations of a unit bank are limited. Therefore, bank managers can pay personal attention. There is a greater opportunity to prevent frauds, irregularities, etc., and increase management efficiency. Administrative efficiency will be excellent.
5. **No Concentration of Funds:** Unlike branch banks, unit banks do not have branches across the country. Therefore, there is no scope for monopoly. In this banking system, there is no opportunity for concentration of funds, which is suitable for the current economic policy.

Unit Banking - Disadvantages (18 యూనిట్ బాంకింగ్ నష్టాలు)

1. **Limited Financial Resources:** Unit banks have limited financial resources. They cannot withstand economic downturns. If industries that borrowed in that area are affected, these banks also suffer. Due to the economic depression in 1931-1932, 5000 banks in America were affected.
2. **Less Scope for Specialization:** In this banking method, usually one person manages all branches. Due to the small scale of business, there is less opportunity to appoint specialists. It is not possible to introduce modern banking methods.
3. **Local Pressures:** When granting loans, banking principles might not be followed, and local influences and pressures might have to be considered. This could compromise banking standards.
4. **Unhealthy Competition:** Unit banks are managed by different managements, leading to intense competition among them and a higher chance of losses. This competition can lead to unnecessary expenses on advertisements and publicity.
5. **Low Capacity to Withstand Losses:** There is no possibility of extending and distributing the risk to other branches. Unit banks do not have the capacity to face major disasters. Due to limited operations, limited resources, and lack of diversification in investments, unit banks cannot withstand losses.
6. **Lack of Control and Coordination:** It is difficult for the government and the central bank to coordinate the activities of countless independent unit banks. Moreover, it is difficult to regulate and control their activities in accordance with the country's monetary policy.
7. **Inconvenience in Fund Diversion:** Due to inconveniences in transferring funds from one region to another, efficient distribution of funds is not possible. It is difficult to divert funds from developed regions to less developed regions, making it hard to eliminate regional disparities in development.

Branch Banking Suitable for India (6.9 భారతదేశానికి అనువైన వ్యవస్థ బ్రాంచి బాంకింగ్)

As explained above, although both branch banking and unit banking systems have advantages and disadvantages, the branch banking system is more profitable. Branch banking is useful for underdeveloped and developing countries, while unit banking is suitable for developed countries.

Due to many facilities and advantages in branch banking, many countries in the world have opted for branch banking. India also follows the branch banking system. The dormant savings of the people in the country need to be mobilized and provided for productive activities. Therefore, this effort will not succeed without branch offices in rural areas. To meet the credit needs of our agricultural sector, a multi-institutional approach including commercial banks, cooperative banks, and regional rural banks has been chosen. The branch banking method is suitable for this. It is difficult for unit banks to operate in rural areas. Five-year plans are being implemented in our country for economic development. Higher levels of financial resources are required. More resources can be collected through the branch banking method.

Branch banks are large banks, with more resources and profits. They can bear losses. Bankruptcy is rare. Unit banks are more likely to go bankrupt. Branch banking increases public confidence and strengthens savings mobilization. Especially for the upliftment of weaker sections and self-employment generation, branch banking is helpful. In 1969, there were a total of 8626 bank branches in our country, which increased to 67,335 branches by March 2000. Nearly 50% of these offices were established in rural areas.

In view of the above reasons, the branch banking system is working perfectly in India – this system is greatly contributing to the development of banks and the people in the country.

Group Banking (సామూహిక బాంకింగ్)

Group banking refers to a banking business where two or more banks operate under the umbrella of a corporation, association, or trust. If two or more banks are directly or indirectly controlled by an association or trust, it is called group banking. This method combines the advantages of both branch banking and unit banking. The following are the advantages of this method:

- Each member bank in the group has its own board of directors, allowing for centralized administration.
- It facilitates the creation of high liquidity and resource mobilization.
- Advertising costs are borne by all member banks.
- Expert services are provided to member banks to ensure efficient operation.
- A uniform accounting system across all member banks allows for efficient business recording.

Disadvantages of Group Banking (010 సామూహిక బాంకింగ్ వల్ల నష్టాలు)

- The central office cannot fully supervise all member banks.
- Sometimes, member banks bear the responsibility for mistakes made by the holding company (central office).
- If one member bank goes bankrupt, it affects other member banks.
- Sometimes, the central holding company's purchasing department may engage in bribery during various purchases, which the member banks have to bear.

Correspondent Banking (కరస్పాండెంట్ బాంకింగ్)

Under the correspondent banking system, a small bank in a village or town establishes a relationship with a large bank in a city. The large bank in the city is called the correspondent bank, and the small bank in the village or town is called the respondent bank. These small banks deposit funds in the correspondent bank in the city. Correspondent banking eliminates the problem of fund transfer that exists in the unit banking system. This system exists in the United States of America.

Chain Banking (గొలుసు బాంకింగ్)

This can be described as another form of group banking. If two or more banks are under the management of one person or a group of individuals, it is called chain banking. It helps to rectify the shortcomings of unit banking. If two or more banks operate on the same principle, not through a holding company like a central office, but through another method, that system can be called chain banking. In this method, a person or a group of individuals acts as a holding company, directing and controlling the activities of member banks. This banking method originated in America in the 19th century and continued until the Great Depression of 1929. The advantages and disadvantages of this system are almost the same as those of group banking.

Mixed Banking (Fixed Banking) (మిశ్రమ బాంకింగ్)

Mixed banking refers to a banking system that provides both short-term and long-term loan facilities required by industries and business organizations. Banks in some European countries, especially Germany, have adopted a mixed banking approach. Banks in Germany form a syndicate, establish industrial enterprises, and invest in their shares and bonds. They also undertake the management of these business organizations. After a period, once the industrial enterprises can stand on their own feet, the banks sell their shares and bonds. In Germany, banks are able to provide long-term loans to industrial enterprises because they are established with high capital, collect long-term deposits, and increase their reserves. Short-term deposits are used for providing short-term loans. In Germany, unlike England, there were no industrial banks, so mixed banking had to be adopted. In that country, banks not only provide short-term and long-term loans but also perform functions such as drawing and discounting bills of exchange, purchasing company shares and bonds, and issuing letters of credit. Due to the absence of discount houses, share issuing companies, and industrial finance institutions as in England, commercial banks in Germany had to provide finance to industries.

Advantages of Mixed Banking (011 మిశ్రమ బాంకింగ్ ప్రయోజనాలు)

1. Comprehensive Loan Provision: A single bank can provide both short-term and long-term loans required by industries. People do not need to go to different banks for different types of loans. People keep most of their money as deposits in commercial banks.
2. Facilitates Long-term Investment: Company shares and debentures are not widely sold. Therefore, if banks also provide long-term investment for industries, companies can mobilize sufficient financial resources.
3. Indirect Support for Long-term Needs: Activities like underwriting industrial shares indirectly provide bank credit for long-term needs. In such cases, it is better for banks to directly make long-term investments. By appointing their representative on the board of directors of a company to which long-term loans have been given, banks can stay informed about its condition and take precautions to avoid losses.

4. **Increased Public Confidence:** When commercial banks make long-term investments in companies, public confidence in those companies increases. People will undoubtedly buy their shares and debentures. It becomes easier for companies to mobilize resources. This is very useful for company management.
5. **Better Understanding of Industrial Environment:** Since banks provide both short-term and long-term loans to industries, banks have a good understanding of industrial problems. Through their nationwide branches, they can accurately assess the industrial environment. This provides an opportunity for industries to operate robustly.
6. **Rapid Industrial Development:** Countries like Germany achieved rapid industrial development due to the mixed banking system. Mixed banking is very profitable in countries where industrial banks are underdeveloped. As other investment avenues are decreasing in countries, new opportunities for investment in industries can be created. A change in this regard is being observed in many countries.
7. **Reduced Uncertainty for Companies:** Since banks provide long-term investments and loans to industries, companies do not face uncertainty about resources or problems in mobilizing resources through other sources.

Disadvantages of Mixed Banking (12 మిశ్రమ బాంకింగ్ సవ్యాలు)

1. **Liquidity Risk:** Banks operate with both long-term and short-term deposits. If these funds are given as long-term loans, the bank may not have the capacity to pay depositors immediately upon demand. This would create a survival problem for the banks.
2. **Vulnerability to Economic Downturns:** During economic depressions, industries incur losses. The values of shares and debenture certificates fall significantly. This also affects the banks that have invested in industries.
3. **Risk of Speculation:** During periods of economic inflation, industries make good profits. Share prices of industries increase. Attracted by profits, banks may buy more industrial shares. This situation can lead to speculation. If company share prices suddenly fall, banks will incur losses.
4. **Excessive Short-term Loans:** When long-term investments are made in a company, more short-term loans might have to be given to that company than necessary. To get out of indiscriminate investments made by the bank in that company, there might be a situation where more loans have to be given.

However, those who support mixed banking believe that the above-mentioned disadvantages are not very dangerous. If the bank's capital and reserves are adequately mobilized, there is no possibility of danger in the mixed banking system. The opinion that commercial banks should also play a major role in industrial development is gaining importance even in countries like England, which oppose mixed banking.

Lesson - 7

COMMERCIAL BANKING IN INDIA

Objectives:

- To understand what organized and unorganized sectors are.
- To identify the institutions and other agencies in the organized and unorganized sectors.
- To learn about the nationalization of commercial banks and the reasons for nationalization.
- To understand the objectives of bank nationalization and the progress achieved after nationalization.
- To learn the precautions to be taken when sanctioning bank loans.
- To understand the types of bank loans.

Aspects:

7.1 Organized Sectors - Unorganized Sectors.

7.2 Money Market - Definition

7.3 Organized Section

7.4 Unorganized Section

7.5 Necessity of Commercial Bank Nationalization

7.6 Reasons for Nationalization

7.7 Objectives of Nationalization

7.8 Progress Achieved by Banks After Nationalization

7.9 Loan Policies - Practices.

7.10 Types of Loans

7.11 Self-Assessment Questions

7.12 Glossary

7.1 Organized and Unorganized Sectors

Money Market: In any country, industrial, agricultural, and service sectors require large-scale investments. Economic development is possible only if large-scale investments are utilized in these sectors. For this purpose, a robust monetary system is essential in every country to

promote savings movements, increase people's savings, and convert them into investments. This monetary system provides the mechanism required to provide short-term, medium-term, and long-term loans. This monetary system includes all financial institutions, commercial banks, development banks, non-banking institutions, chit fund companies, and other investment institutions. Markets that connect lenders and borrowers of monetary funds can be divided into two types: (1) Money Market and (2) Capital Market. The money market is where monetary resources are provided from lenders to those who need loans for short-term needs. Commercial banks, domestic banks, and other institutions provide short-term loans to industrial, agricultural, and service sectors. The capital market is where institutions that provide long-term loans, medium-term loans, and investments are located. This market includes development banks, investment institutions, etc. Industrial and business organizations raise their capital by issuing shares, bonds, and through other means.

Definition of Money Market: As defined by Madden and Nadler, "The money market is the place where the financial transactions of a country or the world are settled through short-term loan transactions." According to Professor Crowther, "The money market is the name given to various institutions dealing with different classes of near money." The money market includes merchants, speculators, brokers, industrialists, manufacturing organizations, government, commercial banks, financial institutions, insurance companies, and the central bank. In this market, commercial bills, promissory notes, government securities, shares, bonds, etc., are bought and sold. All these instruments are considered near money. The central bank is the cornerstone of the money market.

Division of Money Market: The Indian money market is divided into two parts: (1) Organized Sector and (2) Unorganized Sector. These are explained below.

(1) **Organized Sector:** The Reserve Bank, public and private sector commercial banks, development banks, regional rural banks, foreign banks, etc., belong to the organized sector. State, central, and primary cooperative banks within the cooperative system also fall under this.

- i) **Reserve Bank:** This is the central bank of our country. Its main functions include issuing currency notes, acting as a bank to the government and other commercial banks, controlling credit, and protecting international monetary funds. The Reserve Bank works hard to establish close relationships among the members of the organized market sector. The Reserve Bank strives to achieve monetary stability, social welfare, and economic progress.
- ii) **Commercial Banks:** In the commercial banking sector, the State Bank is the largest bank. Where Reserve Bank offices are not present, State Bank branches act as representatives of the Reserve Bank. In our country, 27 public sector banks, 31 private banks, and 196 regional rural banks are operating in the organized sector, including their branches. All these provide financial resources to commercial, industrial, and agricultural sectors. Approximately 65,000 commercial bank branches are operating in the country.
- iii) **Foreign Banks:** There are 41 foreign banks in our country. They conduct all types of banking business like other Indian commercial banks. They primarily handle foreign exchange transactions.
- iv) **Development Banks:** The main objective of development banks is to create a favorable environment for industrial development in the country. Currently, more than 20 development banks are operating in the organized sector in our country. For example, the Industrial Finance Corporation of India (IFCI), Industrial Development Bank of India (IDBI), etc.
- v) **Cooperative Banks:** These assist the agricultural sector. Land development banks specifically provide long-term loans for agriculture. Currently, 29 state cooperative

banks, 367 district central cooperative banks, and 95,000 primary agricultural credit cooperative banks are operating in our country.

(2) Unorganized Sector: In the unorganized sector, indigenous bankers, moneylenders, non-banking institutions, chit funds, and investment institutions operate. They do not differentiate between long-term and short-term loans. These institutions do not have a desirable relationship with the Reserve Bank.

- i) Indigenous Bankers: An individual or institution that accepts deposits from the public and then lends them to individuals or businesses in need is called an indigenous banker. Indigenous bankers hold a very important position in the Indian money market. They also discount bills of exchange. They sanction loans for the development of domestic trade. However, they charge higher interest rates. The RBI does not have full control over them.
- ii) Moneylenders: Moneylenders are part of the indigenous financial institutions representing the unorganized sector of the Indian money market. Their primary business is moneylending. Moneylenders concentrate their activities in limited areas. They generally provide consumption loans. They do not care about the utilization of loans.
- iii) Non-Banking Institutions: Financial institutions that are not banks can broadly be called non-banking financial institutions. A non-banking finance company is an institution that accepts deposits under any scheme and sanctions loans under any method. Non-banking companies operating in the non-banking finance sector can be divided into two types: (1) unregistered companies and (2) companies belonging to the corporate sector. Some of these companies are registered under the Companies Act but operate without the permission of the Reserve Bank. Some are registered under the Companies Act and operate with the permission of the Reserve Bank. Non-banking companies are as follows:
 - Hire Purchase Finance Equipment Leasing Companies
 - Investment Institutions
 - Lending Institutions
 - Housing Finance Companies
 - Chit Fund Companies
 - Institutions operating in the form of Nidhi.

In 2000, approximately 1547 non-banking companies were operating in our country, and the total deposits collected by them amounted to up to Rs. 19,342 crores. These companies held 2.2% of the total commercial bank deposits. Information about many small financial institutions operating is not available with the Reserve Bank.

The Indian money market is not well developed. The following shortcomings appear to be the reasons for this:

- Unrelated divisions
- Existence of the unorganized sector
- Differences in interest rates
- Lack of a bill market
- Shortage of loanable funds
- Inelasticity of funds

- Importance of indigenous bankers
- Inability to attract foreign exchange funds.

The Reserve Bank has undertaken many measures to rectify the above shortcomings. It has been able to reduce the differences in interest rates across different periods and regions to some extent. Through open market operations and bill market schemes, it has been able to bring about significant changes in monetary pressures. However, there are still many shortcomings that the Reserve Bank has not been able to resolve.

Nationalization - Achievements (జాతీయీకరణ - సాధించిన ఫలితాలు)

Necessity of Commercial Bank Nationalization: In India, during the 1960s, commercial banks provided very little credit to priority sectors such as agriculture, small industries, and exports. These banks primarily provided large loans to industries and large commercial organizations. In a planned economic system, it is essential for banks to distribute their loans productively to all productive sectors. Also, bank policies should not promote monopolistic tendencies, concentrate economic power, or misuse resources. To make commercial banks promote social and economic benefits, the central government imposed social control over banks in 1968. Social control did not yield the desired results. As the government felt that imposing social control without nationalizing banks was meaningless, the central government nationalized 14 commercial banks on July 19, 1969. Later, in April 1980, another 6 commercial banks were nationalized.

Reasons for Nationalization: The following reasons can be cited for the nationalization of banks:

1. **Concentration of Wealth and Power:** Banks in the country were controlled by a few industrialists for their self-interest. A few private individuals established banks with small capital and accepted huge deposits from the public, utilizing those funds for their own benefit. This led to the concentration of economic power and wealth in the hands of a few. The solution to this was nationalization.
2. **Ownership and Control in a Few Hands:** Indian banks were in the hands of a few individuals with large shareholdings and operated under their direction. Bank credit was also available to their followers. It was observed that the capital of large banks was concentrated in a few industrialists. The government felt the need to decentralize capital.
3. **Speculative Activities:** Since banks in our country were under the control of wealthy industrialists, they used them for their self-interest. Managements engaged in illegal activities such as speculative trading, depositing foreign exchange in other countries in their names, buying joint-stock company shares with a profit motive, creating artificial scarcity, and sanctioning loans to organizations under their control without collateral.
4. **Branches Limited to Urban Areas:** Private banks in our country established their branches only in urban areas. They never set them up in villages. Ours is an agricultural economy. More than 70% of the people live in rural areas and are engaged in agriculture. The government recognized the need to establish bank branches in villages to mobilize the savings of all these people and contribute to rural development.
5. **Loans to Directors:** Bank directors received loans at low interest rates. They would take loans at low interest and lend them to their relatives and friends. In 1969, among 20 large banks, 188 individuals served as directors, and they also served as directors in 1452 other companies. Therefore, bank funds were used for the personal gain of

directors rather than national development. Loans were provided only to companies where they were directors. Ordinary people and other sectors had no opportunity to receive loans. Especially agriculture, rural development, small industries, and export sectors were not provided with credit.

6. To Unearth Black Money: Banks under private management were not very helpful in unearthing black money and hidden wealth. To tackle this problem, nationalization of banks became inevitable.
7. Establishment of a Socialist Society: Banks were making profits with public money. These profits were reaching only a few individuals. If they were nationalized, these profits would go to the government. By utilizing them in productive activities, the government could improve the economic conditions of the people. This means that bank nationalization could contribute to the establishment of a socialist society.
8. Neglect of Small Businesses: Before nationalization, bank loans primarily benefited large industries. Small businesses, cottage, and rural industries did not receive any credit. After nationalization, priority was given to the primary sectors.
9. Credit Control: Commercial banks create money. This increases the money supply and leads to inflation. Commercial banks must strictly implement the measures taken by the Reserve Bank to curb these situations. However, our commercial banks were not implementing RBI directives. Therefore, nationalizing banks would enable the Reserve Bank to have full control over them.
10. Other Benefits:
 - Nationalization makes resources available to the government for national economic planning.
 - Provides full protection to depositors.
 - Improves the living conditions of bank employees.
 - Prevents unnecessary competition among banks.
 - Fosters good relations between the central bank and commercial banks.

Objectives of Commercial Bank Nationalization (వాణిజ్య బాంకుల జాతీయీకరణ లక్ష్యాలు)

The government nationalized banks with the following objectives in mind:

1. To remove the dominance of a few individuals over banks.
2. To increase the growth rate in agriculture, small industries, and export industries.
3. To develop backward regions.
4. To eliminate disparities between different regions of the country in terms of banking facilities.
5. To provide opportunities for specially trained and skilled individuals in bank management.
6. To provide good salaries, allowances, and training facilities to bank staff.

Progress Achieved by Banks After Nationalization (జాతీయీకరణ తర్వాత బాంకులు సాధించిన ప్రగతి)

The nationalization of banks is an unforgettable event in Indian banking history. With the nationalization of banks, 90% of bank deposits came under the control of public sector banks. Significant changes occurred in the outlook, working methods, and objectives of commercial banks. Desirable changes took place in credit policy. The banking system underwent

significant transformation. It achieved commendable progress in terms of size and expansion. Now, banks have become powerful instruments for implementing government policies. An inseparable link has been established between government objectives and credit policy. Efforts are being made to reduce regional disparities in banking expansion and achieve balanced development across the country. To eliminate regional economic inequalities, create employment opportunities, expand systemic efficiency, promote the economic upliftment of backward people, and achieve economic development in backward regions, significant changes have been introduced in the banking sector.

Due to changes in banking policy, some sectors that were neglected in the past are now receiving credit. Credit is now widely available to small-scale industries, agriculture, small businesses, professionals, and weaker sections. By providing indirect support facilities, the Reserve Bank is enabling commercial banks to contribute more to these sectors. Banks are providing increasing assistance to poverty eradication programs, which are our social objectives. The progress achieved by nationalized commercial banks can be understood through the following points:

(1) Branch Expansion: The expansion of bank branches is very essential for rapid economic development of the country. The main objective of nationalizing banks was also to establish bank branches in areas without banking facilities, especially in rural areas. The expansion of bank branches, especially in rural areas, occurred through the newly introduced 'Lead Bank Scheme'. Significant changes occurred in the concentration of branches, which were primarily in urban areas at the time of bank nationalization. The expansion of bank branches after nationalization can be understood through the following table.

Progress of Commercial Banks - 1969-2002 Table - 1

Aspects	June 1969	June 1975	June 1980	June 1985	March 1990	March 1995	June 2002
1. Number of Scheduled Banks	73	74	148	264	270	281	299
2. Regional Rural Banks		73	183	196	196	196	
3. Bank Offices	8262	18730	32419	51385	59752	62367	66,967
4. Public Sector	6669	15064	25828	35629	41874	44764	46,118

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7.7 Bank Offices

5. Branch Population (in thousands)

64, 32, 21, 15, 14, 15, 15

6. Per Capita Deposits (Rs.)

88, 208, 494, 1026, 2098, 4242, 10500

"Commercial", "Banks", "Branches", "Growth", "1969 - 2002"

"Region Description", "25.5", "25", "25 2–5", "25"

"1969", "1975", "1991", "2000", "2002"

"1. Rural Areas", "1832", "6806", "35212", "32,771", "20413"

"(", "22.4%) (36.4%)", "(58.2%) (50.2%)", "(39.6%)"

"2. Small Towns", "3322", "5570", "14329", "12664", "11281"

"(40.1%)", "(29.7%)", "18.7%", "(21.9%)", "(24.5%)"

"3. Towns", "14447", "3266", "7630", "10051", "10059"

"(17.5%)", "(17.4%)", "(12.7%)", "(15.4%) (19.5%)"

"4. Cities", "1661", "3088", "6128", "8189", "8358"

"Port Towns", "(20%)", "(16.5%)", "(10.2%) (12.5%) (16.4%)"

"Total", "8262", "18730", "60,251", "65340", "51494"

(100%) (100%) (100%) (100%) (100%)

(Acharya Nagarjuna University)

Table - ii

The progress achieved by commercial banks after nationalization has been remarkable. Bank branches have expanded nationwide. These details are shown in Table I. Before 1969, commercial bank branches were limited only to cities and towns. Rural people were unaware of commercial banks. The government felt the need to increase banking facilities in rural areas and small towns to achieve our economic and social goals. In June 1969, the number of scheduled banks in the country was 73, which gradually increased to 299 by June 2002. This includes 196 regional rural banks. In June 1969, the total number of bank branches was 8262, which gradually increased to 66,967 by June 2002. Public sector bank branches increased from 6669 in 1969 to 46,118 by June 2002. This is a significant development. In 1969, one bank branch served a population of 64,000, while by June 2002, this number was recorded as one bank office serving a population of 15,000.

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Banking System

7.8 (Banking Financial Systems)

The expansion of commercial banks in rural and urban areas is explained in Table (II). In June 1969, there were 1832 branches in rural areas, and this number increased to 35,212 by June 1991. However, in the later period, the number of rural bank branches declined. By June 2002, this number was recorded as 20,413. In small towns, there were 3322 branches in June 1969, which increased to 14,329 by June 2000 and then decreased again to 12,664 branches by June 2002. However, in towns and cities, the number of branches increased somewhat after June 1991. The table shows that in June 1991, rural branches accounted for 58.4% of the total bank branches, which decreased to 39.6% by June 2002. The main reason for this is that rural branches incurred losses. As a result, the growth of many rural branches can be said to be somewhat improved. After nationalization, the extensive expansion of branches occurred due to the introduction of the Lead Bank Scheme for bank expansion in the country. The expansion of branches in rural areas increased opportunities to collect large amounts of deposits from rural people and provide more credit to the agricultural sector. In addition, it became possible to control the gross activities of unorganized money institutions and moneylenders entrenched in villages.

(2) Deposit Collection: Before the nationalization of banks, bank branches were limited to urban areas, making it impossible to collect deposits from all parts of the country. However, after nationalization, with the establishment of a large number of branches in rural areas as well, deposit collection developed significantly. The growth of deposits of all scheduled banks after nationalization can be seen in the table below.

Table

Year

All Scheduled Banks Deposit Growth

Deposits (Rupees in Crores)

1969 255 4646

1971 25 5910.

1991 25 1,92,540.

2000 5 8,13,344

2002 11,03,360.

At the time of nationalization, in June 1969, total bank deposits were Rs. 4646 crores, which increased to Rs. 1,92,540 crores by June 1991. These significantly increased to Rs. 11,03,360 crores by March 2002. After the nationalization of banks, there was an increase of almost 70 times in bank deposit collection. Not only in the volume of deposits, but also in quality, there was a change. Currently, fixed deposits are more numerous than demand deposits. In March 2002, out of total bank deposits of Rs. 11,03,360 crores, fixed deposits accounted for Rs. 9,50,312 crores and demand deposits for Rs. 1,53,043 crores. This is a very desirable situation. The increase in the country's economic growth rate and the increase in money supply due to government policies also led to an increase in bank deposits. However, in

recent times, commercial banks have faced severe competition from housing finance banks, leasing and investment companies, and mutual funds.

3. Credit Expansion: After the nationalization of banks, there has been a significant increase in bank loans. The government, in line with its economic and social objectives, expanded advances by introducing many new schemes such as the Lead Bank, Village Development Centers for commercial banks. Banks have taken on the responsibility of meeting the growing needs of the industrial and agricultural sectors, as well as commercial and business needs, and rural development schemes.

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Schemes have been launched to expand advances. Along with the increasing needs of the industrial and agricultural sectors, banks have taken on the responsibility of providing assistance for commercial and business needs and rural development schemes.

"Table", "All Bank Credit", "Details"

"Year", "Loans (Rs. in Crores)"

"25 1951", "580"

"2951969", "3,599"

"2005 1971", "4,690"

"2555 1991", "1,16,300"

"2000", "4,35,958"

"2002", "5,89,723"

Details of all scheduled bank credit advances are provided in the table above. In June 1951, loans provided by banks were Rs. 580 crores, which increased to Rs. 3599 crores in June 1969. In subsequent years, credit increased phenomenally. By June 1991, total bank credit increased to Rs. 1,16,300 crores. By March 2002, total bank loans significantly increased to Rs. 5,89,723 crores. This increase is significant.

4. Credit to Priority Sectors: Before the nationalization of banks, the responsibility of providing credit facilities to the agricultural sector was considered to be that of cooperative societies. Therefore, commercial banks neglected the agricultural sector. Since banks were under the control of large industrialists, they did not provide credit to small industries and small business organizations. After nationalization, the government identified certain sectors as priority sectors. These include agriculture, small-scale industries, small businesses, small vehicle owners, and other priority sectors. Later, retail trade, professionals, self-employed individuals, education, housing for weaker sections, and consumption expenditure loans were included in the priority sectors. Although a significant portion of the national output was produced in these sectors, the assistance provided by banks was negligible. Banks were

nationalized with the intention of providing loans to these priority sectors. After 1969, the government ensured that banks gave adequate importance to priority sectors.

The Reserve Bank directed commercial banks to implement the following principles for the expansion of credit to priority sectors:

- (i) 40 percent of the total bank credit should be allocated to priority sectors.
- (ii) 40 percent of the total loans given to priority sectors should be provided to the agricultural sector.
- (iii) 50% of direct loans provided to agriculture and allied activities should reach the weaker sections.
- (iv) 12.5% of the credit should be provided to rural artisans, cottage industries, and small industries.
- (v) 12% of bank credit should be provided to exporters.

Details of credit given by banks to priority sectors can be seen in the tables below. In June 1969, banks

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7.10 (Banking Financial Systems)

provided only Rs. 440 crores to priority sectors. By June 1971,

"Table", "Banks", "Given to Priority Sectors", "Credit", "Details (Rs. in Crores)"

"Priority Sector Item", "June", "June", "June", "March"

"1969", "1971", "2000", "2002"

"1. Agriculture", "160", "340", "45,425", "51,922"

"2. Small Scale Industries.", "260", "440", "52,899", "56,002"

"3. Other Priority Sectors", "20", "130", "37,609", "46,490"

"Total", "440", "910", "1,35,923", "1,54,414"

It increased to Rs. 910 crores. In the later period, bank credit to priority sectors significantly increased, reaching a total of Rs. 1,54,414 crores by March 2002. Loans given to priority sectors increased from 12 to 42 percent of total loans. Credit to the agricultural sector, which was Rs. 160 crores in June 1969, increased phenomenally to Rs. 51,922 crores by March 2002. Credit facilities also significantly increased for small-scale industries and other priority sectors.

The Narasimham Committee seriously considered the non-repayment of loans given to priority sectors, retail traders, self-employed individuals, and poverty alleviation programs. As a result, the Narasimham Committee recommended limiting the credit given to priority sectors to 10% of total loans in phases.

After nationalization, banks paid special attention to the financial needs of farmers and rural areas. Not only did the volume of loans provided to agricultural banks increase, but also their representation. The percentage of agriculturalization, which was 5.4% in 1969, reached 15.8% by June 2000. The measures taken by banks after nationalization to provide more credit to farmers are given below.

Many banks specifically established agricultural development branches.

Implementation of rural adoption schemes.

Establishment of Village Development Centers.

Refinancing facility for projects by the National Bank for Agriculture and Rural Development.

Establishment of Regional Rural Banks.

Establishment of Farmers' Service Societies to provide better services to farmers.

Introduction of Kisan Credit Cards.

Banks selecting clusters of villages and meeting all types of credit needs of farmers in those villages.

Investments by scheduled banks also significantly increased. In March 2000, total investments were Rs. 3,08,944

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crores, and by March 2002, bank investments increased to Rs. 4,38,269 crores. This total was invested by banks in government securities and other authorized securities.

(5) Lead Banking Scheme: The Reserve Bank introduced the Lead Bank Scheme in December 1969. This scheme was implemented to expand branches and increase banking facilities across the country. Districts were allocated to public sector banks. Each Lead Bank came forward to survey credit needs and open branches in the districts allocated to it. The Lead Bank takes leadership responsibility for collecting socio-economic information, identifying new centers for establishing branches, and developing the allocated districts. Lead Banks are working to coordinate commercial banks, regional rural banks, and other financial institutions to expand credit to priority sectors. Under this scheme, by March 2002, it had expanded to 580 districts in the country.

6. **Bank Credit to Small Scale Industries:** The government recognized that the small-scale industries sector is an important productive sector and that commercial banks need to pay special attention to it in terms of providing financial assistance. After nationalization, banks provided significant financial assistance to small-scale industries. In June 1969, loans of Rs. 260 crores were provided to these industries, and by March 2002, bank loans to small-scale industries reached Rs. 56,002 crores. This can be attributed to the government including this sector in the priority sector. Specifically, banks established special branches for entrepreneurs seeking loans from the small-scale sector. Banks are providing financial assistance for the construction of industrial estates. IDBI and SIDBI banks are refinancing banks that provide loans to small-scale industries.
7. **Export Development:** In a developing economy like India, there is a need to develop exports and earn foreign exchange to meet foreign exchange requirements. In this context, the government is taking various measures to ensure that banks provide adequate credit for export trade. After nationalization, banks recognized the export sector as a priority sector. And loans are sanctioned at concessional interest rates. Banks have the facility to obtain refinancing from institutions like the Export-Import Bank.
8. **Integrated Rural Development:** After nationalization, banks recognized their social objectives and are making significant efforts for rural development, the upliftment of weaker sections, and poverty eradication. Banks are sincerely playing their part in the Integrated Rural Development Program (IRDP) introduced by the Government of India for poverty eradication. Under this program, banks are providing various types of loan assistance to rural families below the poverty line to bring them above the poverty line.

To provide credit to weaker sections at low interest, the government introduced the Differential Rate of Interest (DRI) scheme in April 1972. Under this scheme, public sector banks are providing loans at 4% interest rate to weaker sections with potential for economic development. The total credit provided under this scheme to Scheduled Castes and Tribes was recorded as Rs. 432 crores by March 2000. This accounts for 7.22% of the total credit of public sector banks.

(9) **Social and Service Banking:** By providing significant assistance to poverty eradication programs, integrated rural development schemes, and self-employment schemes, banks are striving to achieve social objectives. Nationalized banks have recently also undertaken service activities. They have become service organizations. For example, the State Bank of India is conducting free medical camps.

After the nationalization of commercial banks, revolutionary changes took place in the Indian banking system. Nationalized public sector banks are implementing innovative new banking policies for the economic and social upliftment of rural people in the country and for the overall development of the nation. The entire banking policy has been restructured to achieve social objectives. Therefore, the Indian banking system has transformed from "Class Banking" to "Mass Banking".

(Lending Policies and Practices)

Banks are financial institutions. Up to 90% of bank resources are collected from the public in the form of deposits. The collected deposits are either sanctioned as loans or invested. A large part of bank resources are used as loans. The main assets of banks are the loans and advances they provide. These loans are the main source of bank profits. Banks provide loans against assets, securities, and personal guarantees. Banks provide financial assistance to industrial and business organizations by discounting bills, and by sanctioning loans, overdrafts, and cash credits. However, it is difficult to convert these loans into cash quickly. It is also difficult to transfer them to others and get money. Therefore, these loans lack liquidity. They have higher profitability but also lower security. They must utilize their financial resources in a profitable manner.

Banks should consider the following when sanctioning loans:

(1) Liquidity: The main principle a bank must adhere to is liquidity. Loans given by the bank should be recoverable on time, or immediately upon demand if necessary. Even if loans are secured, they should not be sanctioned if they are not recoverable in the short term. Banks should give loans against easily marketable securities without loss.

(2) Safety: Among the things banks should consider when sanctioning loans, safety is the most important. The bank should sanction a loan only when there is confidence that the loan will be repaid. All loans sanctioned by banks must have full security. Safety is the foundation of the entire banking business. Generally, bank loans have collateral in the form of goods. In the absence of collateral, it is necessary to have confidence that the person who took the loan will repay it on time. Therefore, banks should not give loans to dishonest individuals. The bank should ensure that loans given for legitimate purposes have adequate security.

(3) Profitability: Banks are business organizations. Therefore, like other business organizations, banks try to earn profits. To pay interest to depositors, dividends to shareholders, and cover operating expenses, the bank must earn sufficient profit. Therefore, loans that generate profits should be sanctioned.

(4) Purpose of Loan: The bank should consider the purpose for which the person seeking a loan intends to use the money. Banks should not sanction loans for illegal businesses or for hoarding goods on a large scale. Loans should not be given for unproductive activities. Therefore, loans should only be sanctioned for productive purposes.

It is important to recognize that in recent times, the purpose for which a bank loan is used is more important than the collateral provided by the individuals receiving the loan.

(5) Diversity in Loans: When sanctioning loans, banks should, as far as possible, give smaller amounts to a larger number of people. If large amounts are given to a few people, the bank will incur significant losses if even one person fails to repay the loan. Similarly, a bank should not lend all its resources to a single type of industry. If that industry faces an economic downturn, the bank is at risk of loss. Loans should be given to various industries and individuals with proper collateral. Banks should follow the principle of "not putting all eggs in one basket."

(6) National Interests: Banks should consider national interests when sanctioning loans. Banks should provide financial assistance to industries, agriculture, export trade, cottage

industries, and self-employment schemes that contribute to the country's economic development. Banks were nationalized with the idea that bank resources should contribute not only to trade and commerce but also to multifaceted economic progress.

(7) Short-term Loans: Banks conduct business with public deposits. Deposits must be repaid immediately upon demand by depositors. Therefore, a bank should not use its resources to give long-term loans. Long-term loans lack liquidity. Loans should not be given for the acquisition of fixed assets by industrial organizations. Loans given by discounting hundis are short-term loans.

Types of Loans: Loans sanctioned by banks are in the following forms.

(1) General Loans: Banks provide these loans with or without collateral. When a certain amount is given as a loan to an individual, the loan amount is credited to the borrower's account, and checks written by that individual are honored. However, the interest collected on this loan is calculated on the full loan amount. If the borrower repays a portion of the borrowed amount to the bank, interest is collected only on the remaining portion. General loans can be given not only to account holders but also to others.

(2) Overdrafts: Banks provide loans to businessmen and investors through overdraft facilities. Overdraft arrangement is a more convenient way of lending. An overdraft means a facility that allows a customer to withdraw more than the balance in their account. In these methods, there is no need to take the loan in advance. It can be taken when needed. Interest is paid only for the period and the amount taken. Banks sanction overdraft credit against security of goods or personal security. The overdraft facility is provided only to current account holders.

(3) Cash Credits: Cash credit is almost like an overdraft. Cash credit is a type of running account opened by the bank for the borrower. The bank opens a current account in the name of the customer and credits the agreed loan amount to it. The borrower can withdraw a specified amount from that account. The amount can be withdrawn at once or when needed. The bank charges interest only on the actual amount used. The cash credit account provides the flexibility to withdraw money at any time. Therefore, businessmen do not keep idle cash with them. Businessmen can deposit their excess cash in the bank to reduce their loan burden. In the cash credit system, borrowers must write bonds. Collateral must also be provided. In our country, loans taken through cash credit are very popular. Almost 70 percent of bank loans are in this form. An overdraft is a special facility provided to meet the temporary needs of the account holder. But cash credit is a more permanent arrangement made for a longer period.

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(4) Discounting of Bills of Exchange: Commercial banks purchase hundis or trade bills at a discount and thereby sanction loans to businessmen. Businessmen can hand over hundis or bills related to their receivables to banks and receive money in advance. Banks deduct a certain amount as interest on such bills and immediately pay the remaining amount to businessmen. The deducted amount is called discount or interest. After the specified period,

banks collect the amount of the bill. This type of loan is provided by banks based on the personal guarantee of the account holders.

(Self Assessment Questions):

- (1) Explain the financial institutions and other monetary agencies working in the organized and unorganized sectors.
- (2) State the reasons for nationalizing banks and explain the progress achieved by banks after nationalization.
- (3) To what extent have banks succeeded in allocating credit to priority sectors?
- (4) State the precautions to be taken by banks when sanctioning loans.
- (5) Explain the types of loans provided by commercial banks?

Key Words:

- (1) Money Market: A market that provides financial resources for short-term needs from lenders to borrowers.
- (2) Capital Market: A market where institutions that provide long-term and medium-term loans and investments are located.
- (3) Non-Banking Institution: An institution that collects deposits from the public through various schemes and sanctions loans through certain policies. Some corporate sector organizations subject to the Reserve Bank and some unregistered organizations are currently operating in our country.
- (4) Priority Sector: The priority sector includes agriculture, small-scale industries, small businesses, small vehicle owners, self-employed professionals, housing for weaker sections, retail businesses, etc.
- (5) Liquidity: Loans given by banks should be recoverable on time or immediately upon demand if necessary. Loans with this characteristic are said to have liquidity. Even if loans are secured, they should not be sanctioned if they are not recoverable in the short term.
- (6) Cash Credit: A loan temporarily sanctioned by a bank to a customer based on the collateral provided by them. In this method, the borrower must write a bond for the loan. Collateral must also be provided.
- (7) Overdraft: A method that allows a customer to draw more than the balance in their account through a check when needed. Banks sanction overdraft credit against security of goods or personal security. This facility is provided only to current account holders.

Lesson – 8

BANKING SECTOR REFORMS

8.0 Objectives

8.1. Introduction

Course Structure

8.2. Banking Sector Reforms

8.2.0 Banking Sector - Stages of Evolution

8.2.1 Banking Sector - Need for Reforms

8.2.2 Establishment of Narasimham Committee, 1991

8.2.3 Pre-appointment status of the Committee

8.2.4. Narasimham Committee 1991 Recommendations

8.2.5 Implementation of Narasimham Committee Recommendations - Banking Sector Reforms (1992-1998)

8.2.6 Narasimham Committee - 1998, formed to review the implementation of Banking Sector Reforms

8.2.7. Narasimham Committee - 1998 Recommendations (Electronic Banking)

8.4. Automatic Teller Machines (A.T.Ms.)

8.5. (Credit Cards)

8.6. (Debit Cards)

8.7. Glossary

8.8. Self-Assessment Questions

8.9. Recommended Books

8.0 Objectives:

In this lesson, students are explained about the various stages of evolution in the banking sector. By the end of this lesson, students will understand the following topics: History and functioning of the banking sector: Need for, recommendations of, and implementation of the Narasimham Committee appointed in 1991; Appointment, recommendations, and implementation of the Narasimham Committee in 1998; Concepts of Electronic Banking, A.T.Ms., Credit Cards, Debit Cards:

8.1. Introduction:

In any country's economic system, after the government, the banking sector handles the largest amount of monetary transactions. In many cases, the government also conducts its monetary activities through banks. Moreover, banks act as a bridge between those with surplus funds and those with financial needs. The banking sector contributes to the economic

development of the country and also serves as an indicator of economic development. For these reasons, there is a great need for the banking sector to be robust. In the course of evolution, given the modern trends in society, the necessity for reforms in the banking sector arose. In view of this necessity, several committees were appointed to review the functioning of the banking sector and provide suggestions for reforms. Among them, the most important was the Narasimham Committee. The essence of this lesson is the review suggestions of this committee.

Lesson Structure:

8.2. Banking Sector Reforms

8.2.0 Banking Sector - Stages of Evolution: When examining the functioning of the banking sector, its evolutionary stages can be explained in three types:

- Performance before 1969;
- Performance after 1969;
- Performance after 1991.

8.2.1. Banking Sector - Necessity of Reforms: On July 19, 1969, 14 private sector banks with deposits exceeding Rs. 50 crores were nationalized. This action was considered a revolutionary step in the banking sector. (Actually, by 1950-51, there were 430 commercial banks in India. As a result of the measures taken by the RBI at that time, this number significantly decreased. By 1999-2000, there were a total of 299 scheduled banks in India.) At that time, banking activities prioritized the customer's presence but not the customer's needs. This led to the rich becoming richer and the poor becoming poorer. To change this situation, banks were nationalized in 1969. As a result, priority increased for the agricultural sector and other priority sectors. With this action, rural industries, cottage industries, and small-scale industries gained importance. Moreover, the number of bank branches and rural branches also significantly increased, bringing banks closer to the people. These circumstances, instead of proceeding as expected, took a distorted path, resulting in a significant decline in bank profitability by 1991. Consequently, the very survival of banks became questionable. To overcome this situation, the necessity to undertake reforms in banking performance arose.

8.2.2. Narasimham Committee, 1991 - Arrangements: After the nationalization in 1969, the banking sector expanded its financial policy geographically and functionally on a large scale. Although the quantitative distribution of credit was attractive, many irregularities occurred in credit distribution control. As a result, the productivity, efficiency, and consequently the profitability of banks significantly declined.

were severely affected. In these circumstances, a high-level committee was appointed in 1991 under the chairmanship of Sri Narasimham, who served as RBI Governor, to review the structure, management, and policies of the banking sector and provide appropriate suggestions.

8.2.3. Pre-Committee Appointment Status: The conditions in the banking sector before the appointment of the Narasimham Committee were as follows. The Narasimham Committee also acknowledged the progress related to these aspects in the preface of its report.

i) The expansion of bank branches, especially in rural areas, occurred on a wide scale;

- ii) The volume of deposits was significant; 2/5th of the total assets in every household system were in the form of bank deposits;
- iii) The level of deposits from rural areas increased from 3% to 15% of total deposits;
- iv) Priority sector credit increased from 14% to 41% between 1969-1991;
- v) Deposit accounts and loan accounts also increased significantly.
- vi) The banking sector was expanded to areas and states where the banking system had not previously penetrated. This eliminated regional disparities.

Problems and Constraints in the Banking System:

Despite the extensive development achieved in the banking sector as described above, due to some constraints, the productivity, efficiency, and consequently the profitability of banks were significantly affected. The main reasons for this can be attributed to the following:

- 1. Directed investments;
- ii) Directed credit schemes;
- iii) Political and administrative interference;
- iv) Low interest rates;
- V) Excessive operating costs:

) 25 (Directed investments)

Banks must possess sufficient immediate liquidity to protect their stability and survival. For this reason, Section 24 of the 1949 Banking Regulation Act stipulated that every bank must hold at least 25% of its total deposits in immediate liquid assets. This percentage to be maintained is called the Statutory Liquidity Ratio (S.L.R). The RBI has the authority to change this percentage. Using this authority, the RBI increased the SLR from 25% to 30% in November 1972, and to 38.5% in 1991. The RBI cited two main reasons for increasing the SLR. The first reason was that a high SLR would control the large amounts of loans sanctioned to the business and industrial sectors; the second reason was that a high SLR would create anti-inflationary conditions.

0.4 (Banking Sector Reforms)

The Narasimham Committee opined that such a high SLR adversely affected the profitability of banks. In reality, SLR had to be maintained in government-approved securities, cash, and gold. The very low interest rates and income derived from these contributed to the decline in bank profitability. The Narasimham Committee opined that the government utilizing public funds by paying very low interest was tantamount to deceiving the public. Moreover, the government often used funds borrowed from banks for paying employee salaries instead of productive activities.

Along with S.L.R, every commercial bank must also maintain 5% of its demand deposits and 2% of its time deposits as Cash Reserve Ratio (C.R.R). In 1962, the RBI was given the authority to ensure this C.R.R ranged from 3% to 15%. Using this authority, the RBI changed the C.R.R multiple times. In 1991, it was kept at a maximum of 15%.

If S.L.R + C.R.R are maintained statutorily, $38.5 + 15 = 53.5\%$ of deposits must be made available at very low interest rates. This means that only 46.5% of the total deposits are available for sanctioning loans. Due to such a low percentage of funds being sanctioned as loans, the profitability of banks significantly declined.

ii) Directed Credit Programs:

A primary objective of nationalizing banks in 1969 was to extend credit facilities to priority sectors, especially rural areas. Sectors that were neglected until then are called priority sectors. Initially, the list of priority sectors included rural and cottage industries, small-scale industries, backward classes, agriculture, and agro-based industries. However, the government expanded the list of priority sectors by adding new types of businesses, making it burdensome for commercial banks to extend credit facilities to all these sectors. In this context, banks were instructed to consider only the needs and intentions of the borrowers, and not necessarily the security provided by them.

Directed credit programs were considered by the government to be successful beyond expectations. However, behind this success were the following factors:

The quality of loan sanctioning decreased, and the debt burden increased day by day, leading to a decline in recoveries. As a result, bank profitability was significantly affected.

When shifting from security priority to purpose priority, banks were asked to consider technological developments, but in practice, this did not happen, and loans and borrowers were not reviewed. As a result, recoveries decreased, and the level of non-performing interest and non-performing assets increased.

iii) (Political and Administrative interference):

In the view of the Narasimham Committee, the most damaging factor for public sector banks was political and administrative interference. For example, loan melas conducted by Congress party leaders helped sanction loans to their workers, disregarding banking regulations. Credit processes initiated as social development schemes turned into irresponsible credit distribution programs. The same situation applied to IRDP (Integrated Rural Development Programme) activities. Due to such circumstances, over 20% of total bank assets fell into this category.

Political interference was not limited to priority sector credit but also extended to other functions of banks, which is regrettable. For example, due to adhering to the advice given by BIFR (Board for Industrial and Finance Reconstruction) regarding sick industries and the orders given by courts in this context, the bank credit policy was significantly damaged. In this way, due to advice, orders, and suggestions, the condition of banks further deteriorated.

iv) (Low) Rates of Interest:

Under the SLR scheme, the government not only utilized bank funds at very low interest rates but also mandated that loans be given to priority sectors and IRDP activities at low interest rates. To compensate for the resulting interest losses, charging high interest rates to the business, commercial, and industrial sectors became a custom. The Narasimham Committee opined that there was no rule that credit facilities intended for social development should be provided at low interest rates. In fact, the committee believed that there was no need or

necessity to reduce interest rates. The committee also opined that using public funds in this manner by banks, the government's financial department, or the public was neither rational nor ethical.

v) (Mounting expenditure of Banks)

From the reasons explained above, it can be understood how the income of banks decreased. When examining the expenses of public sector banks, it is evident that expenses increased unexpectedly, significantly impacting the profitability of banks. The Narasimham Committee cited the following reasons for this increase in expenses:

- i) Increased number of branches, even without financial flexibility or necessity;
- ii) Lack of central office, supervision, and increased inter-branch transactions and adjustments;
- iii) Unexpectedly increased staff numbers and promotions resulting in decreased labor force and a high number of employees at all levels;
- iv) Irresponsible behavior of labor unions, decreased efficiency in customer services, and contributed to a decline in labor productivity.
- v) The operating cost of expanded agricultural and small-scale industry credit was higher than the income generated from it.

Thus, after the 1969 nationalization, commercial banks in India, especially public sector banks, achieved quantitative development but failed to achieve qualitative development. They were unable to face the challenges posed by a weakened financial situation and a competitive environment.

8.2.4. - 1991 (Recommendations of the Narasimham Committee):

After thoroughly reviewing the pre-committee appointment situation, the Narasimham Committee based its suggestions on the following fundamental concept:

"The resources reviewed by the bank came from the common people. Banks are merely trustees of those funds. Banks have a moral responsibility to utilize those funds in a way that provides maximum benefit to depositors. It should be noted that the government also has this moral responsibility. For this reason, governments should not undermine the efficiency, liquidity, and profitability of banks. Governments do not have the right to use bank funds for their daily needs."

The suggestions made by the Narasimham Committee were aimed at achieving the following objectives:

- a) Achieving operational flexibility;
- b) Granting public sector banks freedom and autonomy to make decisions on internal matters;
- c) Establishing professional expertise in the conduct of banking activities;

The Narasimham Committee made the following suggestions in succession for the resolution of various ailments:

Regarding directed investments:

- The government should cease the practice of making necessary changes in SLR rates for fund mobilization.
- It suggested that the current SLR rate of 38.5% should be brought down to 25% within the next 5 years.
- It suggested that the interest rate paid by governments on their borrowed funds should at least be close to the prevailing market rates. Doing so would also significantly increase bank income.
- The RBI should rely on open market operations rather than frequently changing CRR rates as monetary and credit control tools. It suggested bringing the CRR rate down from the current 15% to a level of 3 to 5%.
- The committee suggested that the RBI should pay at least the interest rate paid on one-year fixed deposits on deposits held by banks above the minimum level.

As a result of the above measures, the level of idle cash reserves with banks and the RBI can be significantly reduced, and bank revenue can also be increased.

Regarding directed credit programs:

The Narasimham Committee suggested phasing out directed credit programs. In fact, the Narasimham Committee opined that the agricultural sector and small-scale industries had reached a self-sustaining level and no longer required special assistance. The committee opined that interest subsidies would suffice for the next two decades and that the policy of reduced interest rates could be abolished. Moreover, the committee suggested that directed credit activities should be conducted on a temporary basis rather than a permanent one. The committee suggested re-examining the concept of priority sectors, identifying only the marginalized sections as priority sectors, and limiting the credit facilities provided to them to 10% of total bank credit. It also suggested reviewing this after 3 years to decide whether to continue or discontinue the program. The Narasimham Committee also suggested that the social responsibility of banks should be limited to small-scale industries only. The committee opined that the concept of social banking should not become an obstacle to systematic banking.

Regarding political and administrative interference:

To minimize political and administrative interference in banking operations, the committee suggested abolishing the dual control system. Banks are often in a state of confusion due to control from the RBI on one side and the banking division of the Ministry of Finance on the other. For this reason, the committee suggested that banks should be given complete freedom and the RBI should frequently review their performance. The committee suggested that when appointing the chief executive officer of banks, honesty, integrity, and professional competence should be considered the primary factors, without succumbing to political pressures. The committee also suggested forming an expert committee for the selection of the chief executive officer.

Regarding the interest rate structure:

The Narasimham Committee suggested that all types of interest rates, at all levels, should be determined by market forces. The committee also opined that all controls and regulations related to interest rates should be removed, and reduced interest rates and IRDP subsidies should also be abolished. The committee opined that only the RBI should be recognized as the supreme authorized institution in determining interest rates, and all interest rates should be linked to the bank rate.

Regarding structural reorganization in the banking sector:

To achieve high efficiency in banking operations, the committee suggested reducing the number of public sector banks through mergers and amalgamations. The committee's opinion regarding the structure and management of banks was as follows:

- There should be 3 or 4 large banks across India, including SBI, and their structure and management should be at an international level.
- There should be 8 to 10 national-level banks across India, establishing branches.
- There should be regional banks to satisfy regional needs.
- The activities of regional rural banks should be limited only to rural areas; they should primarily provide financial assistance for agricultural and agro-based activities.
- The committee suggested that since there were sufficient bank branches in rural areas and small towns by 1991, the branch expansion program should be halted. The committee also suggested that banks should be given the freedom to establish branches only on the basis of profitability.

The committee unequivocally suggested halting the process of nationalizing banks and starting new banks only in the private sector. The committee also suggested giving foreign banks the opportunity to establish branches or subsidiaries in India.

8.8 (Banking Sector Reforms)

Other Suggestions: To reduce the burden of non-performing assets and doubtful debts accumulated in various banks, the Narasimham Committee suggested establishing an Assets Reconstruction Fund. The committee also suggested transferring a certain percentage of the non-performing and doubtful debts of nationalized banks and financial institutions to this fund. This measure would enable banks to reduce the burden of their non-performing assets and utilize the funds generated in this context for productive purposes.

The Narasimham Committee primarily criticized the Government of India and the Ministry of Finance in its suggestions. The Narasimham Committee's suggestions can be considered revolutionary in many ways. Their suggestions were strongly opposed mainly by bank labor unions and moderate political parties.

8.2.5. Implementation of Narasimham Committee Suggestions: Banking Reforms (1992-1998)

Despite strong opposition from political parties and bank staff unions in the country, the Government of India largely approved and attempted to implement the Narasimham Committee's recommendations. As a result of these recommendations, the following

measures were undertaken between 1991-92 and 1997-98. These measures should be considered as reforms during this period.

- Regarding the reduction of the Statutory Liquidity Ratio, a key recommendation of the Narasimham Committee, this ratio was gradually reduced from 38.5% to 25% by October 1997.
- Regarding the Cash Reserve Ratio, it was also gradually reduced from 15% to 10% by March 1997, then to 7.5% by May 2001, and further to 4.5% by June 2003. By reducing SLR and CRR rates in this manner, the percentage of funds available with banks increased, creating an opportunity for banks to generate income and expand credit facilities to industries.
- Regarding the regularization of interest rates, the existing 20 slabs were reduced to two by 1994-95. The following measures were undertaken regarding interest rates from 1991-92:
 - Interest rates on deposits with a maturity period of more than one year were decontrolled.
 - The prime lending rate applicable to general advances exceeding two lakh rupees was reduced by all banks, including SBI. Moreover, these interest rates were also brought under decontrol. Such a measure would foster healthy competition among banks and increase their efficiency.
- As part of the reforms, the RBI undertook several prudential norms. As a result of such measures, it would be possible to establish international standards in disclosing the asset-liability position and financial status of banks. RBI supervision would also become easier. A major prudential measure was to create a 100% fund for non-performing assets held by banks. For this purpose, 10,000 crore rupees were made available. In this context, banks were also asked to set aside 30% of their non-performing and doubtful debts in 1992-93 and 70% in 1993-94. As part of the reforms, the RBI set capital adequacy at 8% in April 1992. The RBI also instructed every bank to reach this position within 3 years. By March 1996, almost all public sector banks had reached this position. Furthermore, a two-tier capital policy was also determined for scheduled banks in India as per the suggestions of the Basle Committee. These two tiers would be as follows:

The first stage is the most important and permanent. It should be able to withstand unexpected losses. This includes paid-up capital, statutory reserves, share premium, and capital reserves.

The second stage of capital includes hidden reserves, paid-up cumulative perpetual preference shares, revaluation reserves, general provisions, and reserves for losses; the second stage capital should not exceed 100% of the first stage capital. As part of the reforms, the Banking Companies Act was amended. As a result of these amendments, the central government can raise necessary funds in the form of capital from the public, ensuring that the government's share does not fall below 51%; as part of this, all banks, including SBI, have increased their capital levels by selling shares to the public.

Commercial banks in the country were given complete freedom in establishing new branches, closing down financially unviable banks, and formulating credit policies. However, when exercising this freedom, they must adhere to domestic and international accounting standards.

As part of the Narasimham Committee's suggestions, 10 banks started operating in the private sector, and the government has applications for the establishment of three more banks. These private banks can obtain up to 20% of their capital funds from foreign institutional investors and up to 40% from non-resident Indians. To convert rural savings into investments, the Government of India initiated the establishment of local area banks in the 1996-97 budget. Such banks would provide services to at least three accessible districts. As part of this, one bank each was started in Maharashtra and Karnataka.

Robust measures were also undertaken for the supervision of commercial banks' performance. For this purpose, a special supervisory department was also established in the RBI.

A special act was also formulated in 1993 for the recovery of dues owed to banks. As part of this, 6 special tribunals and one appellate tribunal were also established.

As a result of the above measures, commercial banks in the country are gradually improving their performance.

8.2.6. Narasimham Committee - 1998 on the Implementation of Banking Reforms:

The Ministry of Finance, Government of India, once again formed another committee in 1998 under the chairmanship of former Governor Narasimham. This time, this committee was tasked with examining the performance of the reforms undertaken in the banking sector. For this reason, this committee was referred to as the Banking Sector Reforms Committee. The government requested this committee to review the performance of the reforms undertaken in the banking sector until the date of the committee's appointment and suggest further reforms to be undertaken in the financial sector. Their suggestions should be conducive to shaping Indian commercial banks to withstand the competition prevailing in the international financial sector, especially in the banking sector. The Narasimham Committee submitted its comprehensive report in April 1999. It considered almost all aspects. The points in this report are as follows:

8.2.7. Narasimham Committee 1998 Suggestions:

Necessity of a Strong Banking System: Due to international changes, especially as a result of the establishment of the WTO (World Trade Organization), every country is implementing a full-scale capital account convertibility policy. This will lead to many difficulties in protecting foreign exchange rates and domestic liquidity. To withstand these, strong banks and banking policies need to be formulated. For this purpose, the Narasimham Committee suggested strengthening large banks through the merger process. When doing so, two strong banks should be merged into one, but merging a weak bank into a strong bank would make the strong bank also weak, the committee opined.

Experiment of the Concept of Narrow Banking:

The committee stated that banks with an undesirable level (exceeding 20%) of non-performing assets should experimentally practice this method for rehabilitation. In this experiment, weak banks should invest their funds in short-term, risk-free securities, and thereby banks should provide the necessary protection for their demand deposits, the committee suggested. If this experiment fails, the idea of closing such weak banks should be pursued.

Small Local Banks:

The Narasimham Committee opined that there should be two or three international-level banks across India, and 8 to 10 national-level banks. These national-level banks would provide medium and large-scale credit facilities. After this, the committee advised establishing limited-scope local banks for local needs. The committee suggested that there should be a robust communication system among these three tiers of banks.

Capital Adequacy Ratio:

To strengthen the internal capacity of banks, the Narasimham Committee suggested significantly increasing the ratio between deposits and capital. The committee suggested an asset reconstruction fund to provide relief for banks' non-performing loans.

True Autonomy through Public Ownership:

The committee advised that if banks are completely under government ownership, they cannot achieve complete autonomy. For this reason, the bank's management board should be accountable to shareholders, and they should have a corporate outlook in formulating their policies. The committee opined that the RBI should act only as a guide in bank management and maintain some distance.

Finally, the Narasimham Committee thoroughly analyzed the existing RBI Act, Banking Regulation Act, SBI Act, and Bank Nationalization Acts related to the banking sector and opined that these laws should be amended to suit the changing times.

Along with the above suggestions, the committee also emphasized intensifying the introduction of computers in banks, avoiding political interference in the formation of bank management boards, and improving employment policies, training, salaries, and other incentive schemes. EDI (Electronic Data Interchange) will assist in conducting extensive operations in electronic banking. In electronic banking, fund transfers and account management occur electronically. Since this type of management uses internally linked computers, it can be considered a paperless operation. Smart Card, Electronic Data Interchange, Electronic Home and Office Banking, Electronic Clearance, ATMs, Credit card, Debit card.

Benefits of Electronic Banking:

- Electronic banking can be considered internet banking. It involves no waiting, no queues, and no limited office hours.
- Electronic banking can be considered low-cost banking.
- All types of services can be performed 24 hours a day, seven days a week.
- Electronic banking is referred to as Just-in-Time banking.
- Facilities can be set up at a very low cost.
- Due to its low cost, electronic banking is more beneficial for the corporate sector.
- Assets and liabilities can be managed efficiently through E.B.; this is called E.A.L.M (Electronic Asset Liability Management).

Limitations and Solutions of Electronic Banking:

The committee also advised that the following points should be kept in mind and reviewed when implementing electronic banking.

8.3. Electronic Banking:

Banking plays a major role in commercial activities. In modern times, where business commercial activities are conducted electronically, banking activities cannot be conducted in traditional ways. In this way, electronic commerce can be considered the progenitor and impetus for electronic banking. If activities related to goods and services are conducted electronically, it is called electronic commerce, and if monetary transactions are conducted electronically, it can be considered electronic banking. In the 21st century, conducting banking activities based on technological changes in the information and communication sectors can be considered electronic banking. The method of conducting bank activities electronically was introduced in the U.K. as early as 1971. In India, the credit for first introducing electronic banking goes to the Industrial Credit and Investment Corporation of India. Electronic banking involves powerful information dissemination, program implementation, wide alternatives, powerful speed, convenience, and financial flexibility.

Electronic banking consists of the following components:

Electronic banking from the customer and bank perspective;

Electronic banking between banks;

Electronic central banking,

Electronic banking between the bank and its branches;

The electronic banking system can be reviewed through the following diagram.

Bank Branches

Bank

Customer

Other Banks

Internet

Central Banking

Electronic banking is a screen-based operation. This allows for third-party intervention, and there is a possibility of using this facility for fraudulent purposes. For this reason, strong supervisory measures need to be taken; there are various types of risks in electronic banking. The main ones are - Counter Play Risk, Settlement Risk, Speculation Risk.

Since electronic banking involves paperless operations, there are various types of security risks. There is also a need to make necessary amendments to various banking laws to implement electronic banking.

8.4. (Automatic Teller Machine ATM):-

ATM cards are cards that help a person with a bank account to withdraw cash through special machines installed in designated areas. With the help of ATM cards, in addition to

withdrawing cash, facilities are provided to check the balance in the account and deposit cash into the account. A brief account statement can also be obtained through these ATM machines. ATM cards are made of special plastic. It includes the account holder's name and signature in a way that the ATM machine can recognize. As soon as the scanned signature on the card matches the signature stored in the ATM, the ATM machine allows operations. For additional security, each account holder is assigned a special code number. Although ATM allows operations 24 hours a day, cash withdrawals are allowed only up to a certain amount per day. The ATM system is a part of electronic banking, and many banks are issuing these types of cards to every account holder. This facility has reduced congestion in banks and saved customers the trouble of standing in queues for hours to withdraw cash from the bank. Due to prior agreements with other banks, it is now possible to withdraw cash through other banks' ATMs with one bank's ATM card. However, a small fee is charged for such transactions. The ATM system eliminates the need to carry cash at all times.

There is no need. Due to these ATM cards, Credit Cards, and Debit Cards, the concept of plastic money has come into use. Today, the fact that there is no bank that does not implement the ATM card system indicates their importance.

8.5. Credit Cards:-

Credit card system is an innovative and multi-beneficial financial service among the various financial services provided by commercial banks. This credit card system was first introduced by an American businessman named McNamara. Its comprehensive form is the (Dinars Card) system which came into practice from 1950. In the banking sector, Britain's Barclays Bank first introduced Credit Cards in 1966. In reality, this system is old in Western countries, but it is now gaining momentum in India. In the coming days, this system will create a cashless society.

A credit card means a card that allows the cardholder to purchase goods on credit (without cash), travel, or reside in a hotel for some time. This allows payments to be deferred for some time. It protects from the difficulties of carrying cash. A credit card can be considered a Passport for security, convenience, prestige, and credit facility.

Types of Credit Cards:

Credit cards can be divided into three types based on their utility. The first is a regular credit card - with the help of a credit card, which originated with the term credit facility, goods can be purchased on credit up to a certain amount in designated stores. Travel facilities can be availed. Cash facilities can also be availed when needed. When such a facility is used beyond a specified period, a small amount of interest will have to be paid. By using this facility in a systematic way, consumers can gain multiple benefits. The second type of cards are called charge cards. This type of card facility is limited to purchases made at member establishments. Instead of paying the amount every time a purchase is made, a charge card is used. The accumulated amount is then paid in a lump sum. There are no credit limits, charges, or interest collected. The Diners Club card can be considered a card of this type. The third type of credit cards are called store cards. Credit facilities can be availed through these cards only at the stores of those who issue these cards. Interest is also charged on such credit. In India, such cards are issued by large star hotels and chain stores.

Modern types of credit cards:

In addition to the credit cards described above, many new types of credit card facilities have come into practice in modern times. The main ones are corporate credit cards, business cards, and smart cards. Corporate cards are issued to private and public limited companies and public sector undertakings. The cards thus issued are called primary cards. These primary cards are used only for identification. Cards issued as an add-on to this primary card are called Add-On-Cards. In practice, these Add-On-Cards are issued to persons related to the company. All amounts related to purchases made using these Add-On-Cards are debited to the primary card. In this way, corporate organizations provide this type of credit card facility to their staff and other individuals. The second type of cards are referred to as business cards. These types of cards are used by various organizations of the same type. With the help of these types of cards, they get some special facilities and grow their businesses. Own business organizations, partnership firms, chartered accountants, etc., use these types of cards. The third type of modern cards are called Smart Cards. These can be considered new-generation cards. In these, a certain amount is printed on an internally embedded microchip. Every time the card is used, this balance automatically decreases. After the balance is completely exhausted, the balance must be recharged. The main convenience of this type of card is security. There is no possibility of fraud or errors. Smart Cards can also be used as identification cards. Smart Cards are referred to as electronic purses. In India, this type of card was issued by Dena Bank in Mumbai.

Benefits of Credit Cards:

Credit cards provide credit facilities to the cardholder for cash and goods purchases. Banks that issue cards earn commissions on financial transactions as well as on the purchase and sale of business goods, and interest on credit. Similarly, shopkeepers belonging to the complex of shops that accept credit cards benefit from increased business volume and also avoid the problem of bad debts. In this way, credit cards provide multifaceted benefits.

8.6. Debit Cards:

Globally, in the last decade, the credit card system has emerged as a definite alternative to paper money. Developed countries like the USA have gone a step further and popularized the debit card system. In the USA alone, by March 1997, 67 million debit cards handled transactions worth 62.9 billion dollars. Like credit cardholders, debit cardholders also purchase goods at designated stores and sign their sales slips as proof of purchase. This amount is automatically debited from the debit cardholder's bank account. Monthly statements related to these debited amounts are sent to the 2 cardholders. They pay the amounts at their convenience. This facility is similar to an overdraft facility. In a way, it can be considered an overdraft facility extended to a complex of shops. As soon as the transaction takes place, the transaction amount is also credited to the merchant. There is no big difference between credit card and debit card systems except for having a special account in the bank.

8.7. Glossary:

A.T.Ms Automatic Teller Machines

Credit Cards - Cards that provide cash credit purchase facility

Debit Cards - A system that debits the account holder's account for the purchase amount made by the account holder

S.L.R - Statutory Liquidity Ratio

C.R.R. - Cash Reserve Ratio

I.R.D.P. - Integrated Rural Development Programme

B.I.F.R. - Board for Industrial and Finance Reconstruction

R.B.I - Reserve Bank of India

P.L.R. - Prime Lending Rate

- (Capital Adequacy Rate)

W.T.O. - World Trade Organisation

E.A.L.M. - Electronic Asset Liability Management

8.8. Self-Assessment Questions:

5 Mark Questions:

1. Electronic Banking
2. A.T.Ms
3. Credit Cards
4. Debit Cards
5. Designated Investments
6. Designated Credit Schemes

10 Mark Questions:

1. Necessity of Narsimham Committee Formation
2. Briefly write about Banking Sector Reforms

20 Mark Questions:

1. Write about the recommendations of the Narasimham Committee and their implementation regarding banking sector reforms.
2. What is electronic banking and explain some of its components.

8.9. Recommended Books

1. Indian Economy - Ruddar Datt & KPM Sundaram
2. Banking Theory - Monetary Systems (Banking Theory and Financial Systems) - K. Anjaneyulu, K. Lalitha, - M. Prabhakar Reddy
3. Banking and Financial Systems - Mithani & Gordon - Dr. C.V. BRAHMA CHARY

Lesson - 9

BANKING SECTOR REFORMS - CHAKRAVARTHY COMMITTEE REPORT

9.0 - Objectives:

The Government of India appointed a committee under the control of Professor Sukhamoy Chakravarthi to regulate India's monetary policy.

In the period between 1970-80, the banking sector faced many problems.

This committee mainly recommended flexible interest rates.

Specifically, the government took action regarding treasury bills and long-term maturities.

The Chakravarthi Committee made recommendations on bank deposits and lending rates.

9.1 - Introduction

9.2 – Appointment of Chakravarthi Committee

9.3 - Monetary Target

9.4 – Features in Monetary Policy Formulation:

9.4.1 – Broad Measure

9.4.2 - Credit Budget

9.4.3 – Broad outlines of various sectors of credit

9.5 — Flexible Interest Rates

9.5.1 — Interest Rates and Estimated Rate of Inflation

9.5.2 – Interest Rates on Government Securities

9.5.2.1 -"T" Bills

9.5.3 - Bank Deposit and Lending Rate

9.5.3.1 - Bank Lending Rate

9.6 – Criticisms of the Chakravarthi Committee

9.7 - Conclusion

9.8 - Sample Exam Questions

9.9 - Recommended Books

9.1 - Introduction:

A committee was formed in December 1982 under the chairmanship of Professor Sukhamoy Chakravarthi to assess the performance of India's monetary system. Its main objective was to improve monetary control. It submitted its report in April 1985.

9.2 - Appointment of Chakravarthi Committee:

In the early 1970s and 1980s, the Indian economy faced many problems related to the performance of the monetary system. The government's borrowing program grew rapidly. These increasing needs from the government can be explained as follows: Increasing the government's receivables from the Reserve Bank of India. This can be met by increasing the statutory liquidity ratio that banks must maintain.

As a result of the above, government reserves are increasing. And this led to an increase in money supply. As a result, inflationary pressure developed in the economy. To counter the effect of this increase in money supply, the Reserve Bank's requirements were increased from time to time. The Reserve Bank of India's decision to cover the government's fiscal deficit. These were the most prominent reasons for appointing the Chakravarthi Committee to review the monetary system. As Professor Sukhamoy Chakravarthi himself stated, the analysis of the monetary system by Professor Chakravarthi should be done from the perspective of ensuring inflation-free planned development in the coming years.

9.3 - Monetary Target:

Monetary target refers to setting the most favorable target rate for money supply growth as a foundation for monetary control policy. This is one of the most important recommendations due to the fact that price stability is significantly affected by money supply growth. Although it is not the only factor, it is also influenced by many other non-monetary factors. Specifically, the Chakravarthi Committee stated that an average annual increase of more than 4.0% in the wholesale price index should be considered acceptable. However, annual inflation increased by 8.0%, 9.0%, and 10.0% respectively in the 1970s, 1980s, and 1990s. The Chakravarthi Committee did not share the same opinion on the monetary target implemented in countries worldwide. It did not believe in setting strict targets. For them, the monetary target is an unstable rule that must constantly change depending on factors in the economy such as growth. Similarly, money supply growth should be adjusted to the expected growth in money demand. This is related to the expected growth in real income at stable prices. It suggests that a target growth rate of money supply is necessary. These are: To estimate the real output growth rate; It is useful for estimating the real income elasticity of demand for real money.

The output of the above should provide the correct target rate for money supply growth. The Chakravarthi Committee, however, did not use the money supply growth target as mentioned above. It did not put forward any estimate about the income elasticity of demand. Furthermore, the Chakravarthi Committee suggested a range for money supply growth rather than any target value. It did not specify an average annual rate over a long period. In its eagerness to provide sufficient flexibility to monetary policy, the committee recommended that the money supply growth target range should also be subject to revisions during the year in light of emerging trends in output and prices. It suggested a flexible monetary target like a monetary target with feedback. Specifically, the Chakravarthi Committee's view is that this method of monetary target binds the Reserve Bank of India and the Government of India in a joint effort to achieve the desired growth in money supply.

9.4 - Features in Monetary Policy Formulation:

It can be divided into two categories. These are:

9.4.1 - Broad Measure:

The Chakravorthy Committee stated that M_1 is a favorable measure of M , and not M . It did not provide any basis for this preference. M is a broader measure of money supply than M_1 .

9.4.2 - Credit Budget:

The main objectives of the credit budget can be determined as follows:

The permissible level of bank credit to the commercial sector. After determining the money target for the coming year, along with this target, the cash deposit ratio can be used to determine the increasing bank credit for all sectors. By determining the target for M_1 , since it is co-determined with M , the monetary authority has no freedom to determine bank credit. However, banks can change bank credit with less liquidity by changing other resources.

The total increasing bank credit for commerce is determined by taking the share of bank credit going into government securities and other securities. Such investment is given by the current statutory liquidity ratio and the bank's total net liabilities.

9.4.3 - Broad outlines of various sectors of credit:

This is concerned only with the expansion of credit in the commercial sector. Credit as credit in the commercial sector, credit going to the government as previously approved credit for government and other securities. Thus, the Chakravorthy Committee proposed 3 important points. These are:

In the credit budget, the allocation of various sectors of credit is determined in light of planning priorities.

→ If M_3 is revised during the year due to production trends and price behavior, the credit budget will also be revised accordingly.

→ The credit budget for the commercial sector should be compared with demand estimates for such credit.

9.5 - Flexible Interest Rates:

This is the third part of the monetary control scheme recommended by the Chakravorthy Committee and represents a significant departure from the monetary policy practice in force in India. It relates to significant relaxation in the existing interest rate system. The committee does not support the idea that credit should be very low for the government and commercial borrowers in government or private sectors. The main reason for this is that low interest rates encourage high liquidity generation of government debt and leave very little for the Reserve Bank of India. Furthermore, the Chakravorthy Committee suggested revising many interest rates for attracting deposits and lending to commercial borrowers. Specifically, three main points regarding interest rates in the Chakravorthy Committee's recommendations can be discussed as follows:

9.5.1 - Interest Rates and Estimated Rate of Inflation:

The Chakravarthi Committee linked interest rates to the inflation rate. This was based on the hypothesis of the prominent economist Irving Fisher regarding the relationship between monetary and real interest rates.

$i = r + P$ where

i = monetary interest rate,

r = interest rate.

The Chakravarthi Committee's recommendation focused on translating this equation into real practice. The Reserve Bank of India specifically suggested the target it should aim for ' i ' from its own side. It also estimates ' P '. Using the necessary short-term or long-term values yields the appropriate value of " r ".

9.5.2 - Interest Rates on Government Securities:

The Government of India borrows funds through treasury bills and marketable loans of medium and long-term maturities. Of these, more than 90.0% of 'T' bills and more than 30.0% of dated securities are held by the Reserve Bank of India. Since the Reserve Bank of India plays a leading role in these securities, they were able to maintain a consistently low interest rate of 4.9% per annum from 1974 to almost 1983. Low rates reduced the voluntary demand for government securities. The Chakravarthi Committee's main recommendation was to further revise these rates. This was done to encourage competition with other rates in the open market, thereby attracting sufficient voluntary investment in government securities.

The main impetus for revising the structure of government securities arose from the Chakravarthi Committee's concern over the successive annual increase in "H" (high-powered money) due to the Reserve Bank of India's excessive reliance on cash to meet its fiscal deficit. The result of this increase in "H" money is an increase in "M" money through the money multiplier process. The increase in "M" money is related to real output. Therefore, inflationary pressures and a threat to price stability arise in the economy.

9.5.2.1 –“T” Bills:

It should serve as an ideal short-term paper in the money market and be developed as an active monetary instrument.

For this to be possible, the returns on "T" bills must be significantly increased.

"T" bills must be used only to meet unforeseen short-term budget deficits and should not be used cheaply for long-term government funding in place of long-term market loans.

The solution recommended by the Chakravarthi Committee was greater reliance on open market borrowing. The Chakravarthi Committee hoped that compared to private, corporate securities, people would be attracted to government securities through competitive interest rates, security, and liquidity.

9.5.3 - Bank Deposit and Lending Rate:

The key recommendations of the Chakravarthi Committee on bank deposit and lending rates are explained as follows:

→ Deposits with a maturity of more than 5 years must have a deposit rate. It must be determined long-term. $P^0 + \text{positive real "r"}$ not less than 2%.

The one-year deposit rate should be slightly positive in real terms. This indicates that it is equal to the short-term. That is, one year $P + \text{a small positive real 'r'}$.

→ The interest rate on savings deposits should be only 5% per annum.

These interest rates must be determined by the Reserve Bank of India. However, the Chakravarty Committee did not specify how often these rates should be changed and if the Reserve Bank of India would need to revise price estimates when real prices change differently.

The Chakravarty Committee approved financial incentives, i.e., tax exemption on interest income from bank deposits, which led to an abnormal increase in fixed deposits over time. However, these incentives are only for high-income individuals. Small savers do not benefit from such incentives, and the Chakravarty Committee did not recommend this step at this stage.

9.5.3.1 - Bank Lending Rate:

The Reserve Bank of India should provide only a minimum lending rate as a part and leave the remaining amount to market competition among banks. It was recommended that the lending rate should be set 3% higher than the maximum deposit rate.

+2% per annum, so the lending rate should be $P_e + 5\%$ per annum. Therefore, a minimum operating spread of 3% is established between the lending rate and the bank deposit rate. Specifically, the real spread will vary. Non-subsidized loans and

Monetary Economics

9.7 Monetary Policy - Chakravarty Committee

The committee opposed any ceiling rate for advances. The Chakravarty Committee introduced what it called regulated competition among banks. This would encourage better utilization of credit by borrowers and motivate them to improve their credit rating to obtain more favorable terms from their bankers. It would also encourage bankers to focus more on costs, profitability, and the actual needs of their customers.

The Chakravarty Committee attempted to regulate the number of concessional rates, i.e., regarding bank lending to the priority sector. It recommended only two concessional rates:

1. The primary minimum lending rate;
2. The second rate, slightly lower than the primary minimum lending rate, to be determined by the Reserve Bank of India in consultation with the government. The Chakravarty Committee also recommended strengthening the credit delivery system for the priority sector.

9.6 - Criticisms of the Chakravarty Committee:

The Chakravarty Committee's recommendations faced severe criticism for the following reasons, as it was believed they could not curb monetary supply:

The Chakravarty Committee recommended an actual target for annual monetary supply growth instead of a simple growth rate. People opined that the Reserve Bank of India would agree that the government might interpret this provision liberally, thereby undermining its benefit. Especially with the feedback system for monetary targeting, more flexibility was provided. This provides a short-term monetary supply growth target and further reduces any monetary discipline they wish to achieve.

The Chakravarty Committee recommended that each nominal rate should be maintained based on the target real interest rate and the growth rate of short-term and long-term price inflation. The internal estimate is that the actual real 'r' will be equal to the estimated 'r'. Clearly, this is only true if $P=P^e$. An error-free estimate of 'P' is not easily realized. Also, the Reserve Bank of India's price expectations may be very different from the public's price expectations.

The Reserve Bank of India should find it relatively easy to determine nominal rates on deposits for one year, five years, and longer, as well as the primary lending rate for banks. Managing the government securities market to maintain a specific chosen interest rate structure and ensuring sufficient voluntary demand for government bonds and bills is not that easy.

The Chakravarty Committee linked Treasury Bills to short-term 'Pe' and all other interest rates to long-term 'Pe' without providing any reason.

The Chakravarty Committee did not make any recommendations on how and when to revise nominal interest rates.

9.7 -

During the planning period, the RBI in India demonstrated its efforts to control monetary policy. However, it did not succeed in controlling monetary policy. In December 1982, the then RBI Governor Dr. Manmohan Singh appointed a committee chaired by Acharya Sukhmoy Chakravarty. This committee's most important implementation was its efforts towards planned development. Thus, this committee examined various aspects and submitted its report to the central government in 1985.

9.8 - Sample Examination Questions:

I. Essay Questions:

1. Explain the Chakravarty Committee's recommendations on the monetary system.
2. Explain the role of the Chakravarty Committee in India's monetary policy.
3. What is the Chakravarty Committee? Analyze it critically.

II. Short Answer Questions:

1. Explain the criticism of the Chakravarty Committee.
2. What is the Chakravarty Committee - Bank Lending Rate?

III. Brief Questions:

1. Explain the Chakravarty Committee's opinion on government securities.
2. Bank deposit and lending rates?
3. What is a flexible interest rate?

9.9 - Recommended Readings:

1. Rangrajan, C (2001) - "Some Critical Issues in Monetary Policy". Economic and Political Weekly. 24.39:2139.
2. Gupta, Suraj (2008) Monetary Economics Institutions, Theory and Policy, New Delhi; S. Chand & Co. Ltd., PP.409-423.
3. Ghosh Arun (1987) "Monetary Targeting and the Banking Sector". Economic and Political Weekly. 22 (1/2):13-19.
4. Indian Economy in the 21st Century, New Delhi, Academic Foundation, 2002, P.200.

Lesson - 10

MONETARY ECONOMICS

10.1 Narasimham Committee Report on Banking Sector Reforms

10.0 - Objectives:

- The Central Government appointed a committee on banking sector reforms to bring about major reforms in the banking sector.
- These banking reforms would facilitate the large-scale entry of foreign banks into our country.
- After 1991, problems in the banking sector increased significantly. To resolve these issues, the M. Narasimham Committee was appointed.
- This committee worked to enable public sector banks to achieve professional expertise on par with international banks.
- Specifically, this committee prepared proposals to reduce non-performing assets.

Introduction

10.2 - Committee Background

10.3 - M. Narasimham Committee Recommendations

10.3.1 - Autonomy in Banking

10.3.2 - Reform in the Role of Reserve Bank of India (RBI)

10.3.3 - Strong Banking System

10.3.4 - Non-Performing Assets

10.3.5 - Capital Adequacy - Tightening of Provisioning Norms

10.3.6 - Entry of Foreign Banks

10.4 - Implementation of Narasimham Committee Recommendations

10.5 - Criticism of Narasimham Committee

10.6 - Bank Structures and Mergers

10.7 - Asset Reconstruction

10.8 - Modernization of Private Banks and Public Sector Banks

10.9 - Narasimham Committee Hospitality

10.10 -

10.11 - Sample Examination Questions

10.12 - References

10.1 -

From the financial crisis of India in 1991 to its status as the world's third-largest economy by 2011, India has significantly developed in terms of economic growth. The Indian banking sector has also followed suit. During this period, recognizing the evolving needs of this sector, the Ministry of Finance, Government of India, established various committees to analyze the Indian banking sector and recommend laws and regulations to make it more

effective, competitive, and efficient. Two such expert committees were formed under the chairmanship of Maidavolu Narasimham. They submitted their recommendations in reports known as the Narasimham Committee (1991) Report in the 1990s and the Narasimham Committee - II (1998) Report. These recommendations not only helped unlock India's banking potential but were also recognized as a factor in mitigating the impact of the global financial crisis that began in 2007. Unlike the socialist-democratic era between 1960-80, India was not protected from the global economy. Nevertheless, its banks relatively safely escaped the financial crisis in 2008.

From May 2, 1977, to November 30, 1977, he served as the thirteenth Governor of the Reserve Bank of India (RBI). Narasimham is referred to as the father of banking sector reforms in India for his contributions to the banking and financial sector. Some reforms attributed to Narasimham's recommendations include changes in banking structures, the introduction of private sector banks, the creation of asset reconstruction funds, rural banking, changes to capital adequacy and provisioning standards, technological changes, and the modernization of the public sector. Notably, Narasimham served as India's Executive Director at the World Bank. He also worked at the Asian Development Bank. In addition, he served as Additional Secretary in the Ministry of Finance and Additional Secretary in the Department of Economic Affairs. Furthermore, in 2000, he received India's second-highest civilian award, the Padma Vibhushan.

10.2 - Committee Background:

Between 1969 and 1980, India nationalized many banks (14+6=20). This culminated in India's balance of payments crisis, where India had to airfreight gold to the International Monetary Fund (IMF) to borrow money to meet its financial obligations. This event questioned India's previous banking policies and triggered the era of economic liberalization in India in 1991.

By the late 1980s, as rigidity and weaknesses had severely permeated the Indian banking system, the Indian government took several measures to rebuild the country's economy after the crisis. The banking sector, which manages 80.0% of the financial flow in the economy, required serious reforms to gain international reputation, accelerate the pace of reforms, and structurally develop a sufficiently efficient, robust, and competitive economy. This is especially important as it supports the country's financial needs.

In view of these needs, two expert committees were formed in the 1990s under the chairmanship of M. Narasimham, former Governor of the Reserve Bank of India. These are widely credited with leading financial sector reforms in India. The First Narasimham Committee (Committee on the Financial System) was appointed on August 14, 1991, by Dr. Manmohan Singh, then Finance Minister of India.

The Second Committee was the Committee on Banking Sector Reforms. It was appointed in December 1997 by Finance Minister P. Chidambaram. Subsequently, the first is widely known as Narasimham Committee - I (1991) and the second as Narasimham Committee - II (1998).

The main objective of the Narasimham Committee was to study all aspects related to the structure, institutional functions, and policies of the financial system and recommend improvements in their efficiency and productivity. This committee submitted its report to the Finance Minister in November 1991. It was presented in Parliament on December 17, 2016. The Narasimham - II Committee was responsible for reviewing the progress of banking

reforms implementation since 1992 with the aim of further strengthening India's financial institutions. It focused on issues such as the size of banks and capital adequacy ratios, among other things. M. Narasimham, Chairman, Committee on Banking Sector Reforms (Committee - II) submitted the report to Finance Minister Yashwant Sinha in April 1998.

10.3 - M. Narasimham Committee Recommendations:

In 1998, the Central Government made the following major recommendations in this committee's report. They can be explained as follows:

10.3.1 - Autonomy in Banking:

Greater autonomy was proposed for public sector banks to operate with professional expertise on par with their international counterparts. For this, appointment procedures, training, etc., for public sector banks were established. The committee stated that government nominees on bank boards, often Members of Parliament, politicians, officials, etc., frequently interfered in the day-to-day operations of the bank. Specifically, with the aim of holding bank boards accountable for formulating corporate strategy and enhancing shareholder value by reducing government equity, the Narasimham Committee recommended reviewing them.

To implement this, criteria related to autonomous status were identified by March 1999, and 17 banks were considered eligible for autonomous status. But some recommendations, such as reducing government equity to 33%, and the issue of higher professionalism and independence of the board of directors of public sector banks, are still awaiting government adoption and implementation.

10.3.2 - Reform in the Role of Reserve Bank of India (RBI):

The Narasimham Committee's very first proposal was for the Reserve Bank of India to withdraw from the 91-day Treasury Bill market and to limit interbank call money and term money markets to banks and primary dealers. Secondly, the Narasimham Committee proposed a separation of the Reserve Bank of India's roles as a regulator of banks and as a bank owner. The Reserve Bank of India should not be a bank owner while being the regulator of the monetary system. Highlighting the conflict of interest, it stated that the Reserve Bank of India is not sufficient for effective supervision and should divest its holdings in banks and financial institutions.

In line with the Narasimham Committee's recommendations, the Reserve Bank of India introduced the Liquidity Adjustment Facility (LAF), managed through repo and reverse repo operations, to set a corridor for money market interest rates. To initiate this, in April 1999, the Interim Liquidity Adjustment Facility (ILAF) was introduced with further technological, legal, and policy changes to facilitate electronic transfer. Furthermore, regarding this second recommendation, the Reserve Bank of India decided to transfer its respective shares in public banks like State Bank of India (SBI), National Housing Bank (NHB), and National Bank for Agriculture and Rural Development (NABARD) to the Government of India. Subsequently, in 2007-08, State Bank of India, National Housing...

The Central Government has decided to purchase the entire share of the Reserve Bank of India in the Bank and the National Bank for Agriculture and Rural Development.

10.3.3 - Strong Banking System:

The Narasimham Committee recommended the merger of large Indian banks to support international trade. The Narasimham Committee recommended a three-tier banking system in India through the establishment of three large banks with international presence, 8 to 10 national banks, and a large number of regional and local banks. However, the Narasimham Committee warned that large banks should merge only with banks of equal size, not with weak banks, and that weak banks should be closed if they cannot revive themselves. The Narasimham Committee proposed the concept of narrow banking to help rehabilitate weak banks, as a high percentage of their non-performing assets (NPAs) were up to 20.0% of their total assets. Especially in the late 1990s and early 2000s, there was a wave of mergers in banks in India. The Government of India strongly encouraged this in line with the Narasimham Committee's recommendations. However, the level of consolidation recommended by the Narasimham Committee is still awaiting sufficient government encouragement.

10.3.4 - Non-Performing Assets:

Non-performing assets are the single largest and most problematic issue for the banking sector in India. The Narasimham Committee concluded that priority sector lending was the main reason for the decline in profitability of commercial banks in India. The Narasimham Committee recommended that priority sector loans, which were leading to an increase in banks' non-performing assets, should be phased out. Subsequently, the Narasimham Committee also proposed the requirement of "zero" non-performing assets for all Indian banks with an international presence. According to the 1998 report, it blamed poor credit decisions, directed lending, and cyclical economic factors, among other reasons, for the uncomfortable rise in these banks' non-performing assets.

The Narasimham Committee recommended the creation of Asset Reconstruction Funds or Asset Repayment Companies to take over banks' bad debts, so that they could start with a clean slate. Furthermore, it rejected the option of reconstruction investment through budget allocations. Overall, the Narasimham Committee's recommendations for reducing NPAs to 3.0% by 2002 and for an independent credit review policy for improved management of loan portfolios led to the introduction of new legislation. This was implemented as the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002, and came into force from 21.06.2002.

10.3.5 - Capital Adequacy - Tightening of Provisioning Norms:

To improve the inherent strength of the Indian banking system, the Narasimham Committee recommended that the government increase the prescribed capital adequacy norms. This would also improve banks' risk-taking capacity. The Narasimham Committee aimed to increase the capital adequacy ratio to 9.0% by 2000 and to 10.0% by 2002. To implement the Narasimham Committee's recommendations for penal provisions for banks that failed to meet these targets, the Reserve Bank of India (RBI), in October 1998, initiated the second phase of financial sector reforms by increasing the capital adequacy ratio of banks by 1.0%. And, similar to the Narasimham Committee, it tightened prudential norms for provisioning and asset classification in a phased manner. Thus, the Narasimham Committee II report aimed for the Reserve Bank to bring the capital adequacy ratio to 9.0% by March 2001.

Similarly, in line with the recommendations made by the Mid-Term Review Committee of the Reserve Bank's Monetary and Credit Policy, another series of reforms was announced. A new review committee was formed in October 1999.

10.3.6 - Entry of Foreign Banks:

The Narasimham Committee suggested that foreign banks wishing to establish business in India should have an initial capital of at least \$25 million, which is more than the existing \$10 million. It allowed foreign banks to set up subsidiaries and joint ventures, which would be treated on par with private banks.

10.4 – Implementation of Narasimham Committee Recommendations:

In 1998, Bimal Jalan, the Governor of the Reserve Bank of India, informed banks that the Reserve Bank of India had a three to four-year perspective on the implementation of the Narasimham Committee's recommendations. Based on other recommendations of the Narasimham Committee, the concept of a Universal Bank was discussed by the Reserve Bank of India, and finally, ICICI Bank emerged as India's first universal bank. The Reserve Bank of India published a report on the actions taken on the Narasimham Committee's recommendations on its own website on 31.10.2001. Many of the Narasimham Committee's recommendations have been implemented.

10.5 — Criticism of the Narasimham Committee:

Bank employee unions in India protested against the M. Narasimham Committee report. In particular, the Reserve Bank Employees' Association expressed strong protest against the Narasimham-II Committee report. The United Forum of Bank Unions (UFBU), representing approximately 1.3 million bank employees in India, met in Delhi to formulate an action plan in the context of the Narasimham Committee report on banking reforms and drew up other plans. There was also criticism in some quarters that this Narasimham Committee was anti-poor. According to some, the committee failed to recommend measures to rapidly eradicate poverty in India by creating new employment. This caused considerable difficulties for small borrowers and individuals and businesses in the small, micro, and small-scale sectors.

10.6 - Bank Structures and Mergers:

Bank mergers for the creation of strong public sector mega banks were first recommended by the Narasimham Committee in 1991. The merger of India's "10" public sector banks in 2020 was based on the recommendations of this committee.

10.7 – Asset Reconstruction:

Some recommendations related to the creation of asset reconstruction companies, as a tool to securitize bad debt, were based on the Narasimham Committee's recommendations. In particular, the Narasimham Committee also introduced the concept of an Asset Reconstruction Fund to take over bad debts. Following this, six special Debt Recovery Tribunals were set up. This served as the foundation for India's current Insolvency and Bankruptcy Code, which was codified in 2016.

10.8 – Private Banks and Modernization of Public Sector Banks:

Some other recommendations from Narasimham included the establishment of new-generation private sector banks, including ICICI Bank, HDFC Bank, and Kotak Mahindra Bank. According to Narasimham's recommendations, banks raised money from capital markets. Interest rates were also deregulated to increase competition among banks. The

Narasimham Committee recommended that the government separate management from ownership in other public sector banks.

10.9 - Narasimham Committee's Reception:

Initially, the Narasimham Committee's recommendations received a good response from all quarters, including the Indian Planning Commission. Most of the Narasimham Committee's recommendations were successfully implemented. During the financial crisis of 2007-08, the Indian banking sector performed better than its international counterparts. It is also credited with successfully implementing the Narasimham Committee's recommendations, especially with specific suggestions related to capital adequacy experiments and the recapitalization of public sector banks. The impact of these two committees is very significant. Especially politicians and financial sector experts have been discussing this report for over a decade since its first submission, praising their positive contributions.

10.10 -

Public and private sector banks in India did not perform satisfactorily until the announcement of the New Economic Policy of 1991. Similarly, during the financial crisis, the role of Indian banks was to instill the idea of how to lead the economy forward. With the perspective that the banking sector should function more competitively, under the Ministry of Finance, then Finance Minister Dr. Manmohan Singh, the Narasimham Committee was recognized for its analysis of banks in India. This committee was formed under the chairmanship of Maidavolu Narasimham. Similarly, Finance Minister P. Chidambaram once again formed a committee on banks for the second time in 1998 under the chairmanship of M. Narasimham. Thus, the Narasimham Committee was identified as Narasimham Committee-I and Narasimham Committee-II. The Narasimham Committee's important decisions can be said to be strengthening the banking system, the narrow banking policy, the role of RBI with reforms, government ownership, reducing or zeroing the NPA ratio, and establishing foreign banks.

10.11 - Model Examination Questions:

I. Essay Questions:

1. State the Narasimham Committee's recommendations on monetary policy?
2. Explain the impact of the M. Narasimham Committee on banking sector reforms?
3. Critically explain the recommendations of the M. Narasimham Committee?

II. Short Essay Questions:

1. Explain the Narasimham Committee's recommendations?
2. Mention the criticism of the Narasimham Committee?
3. Explain the background of the Narasimham Committee?

III. Short Questions:

1. Narasimham Committee Strong Banking System
2. Non-Performing Assets
3. RBI's role in reform

7.12 - References

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5. Anurag (2011) - "Banking Sector Reforms 1999-2000" BanknetIndia.com.
6. Banking Reforms (2008) Sudha Mahalingam, Frontline, Vol.15, No.10, PP.9-22, May, 1998.

Time: Three hours

M.A (Economics) DEGREE EXAMINATIONS
Second Semester
Economics
Paper-II - MONETARY ECONOMICS
Answer ALL questions.
All questions carry equal marks.
202EC21

Maximum: 70 marks

(a) What are the determinants of money supply and discuss the functions of money?

Or

(b) Discuss the various determinants of High powered money.

(a) Discuss the major features of Tobin's theory of demand for money.

Or

(b) Explain the major features of Friedman's theory of demand for money.

(a) Explain the importance of the IS-LM model.

Or

(b) Briefly outline the equilibrium in the product market.

(a) Write about the different methods of credit control.

Or

(b) Analyze the different issues relating to the nationalization of commercial banks in India.

(a) Discuss the need for banking sector reforms in India.

Or

(b) Write about the important issues relating to the Chakravarthi committee report.