

Money: Definition, Functions, Concept of Money and Near Money Demand for Money

Introduction

Money is an inseparable part of our daily lives. From purchasing a cup of tea to buying a house, every economic activity revolves around money. Today, it is difficult to imagine life without money because it facilitates the exchange of goods and services and makes economic transactions smooth and efficient.

In ancient times, people exchanged goods through the barter system. For example, a farmer who produced wheat exchanged it with a weaver for cloth. However, this system faced many problems such as the lack of double coincidence of wants, indivisibility of goods, and difficulty in storing wealth. To overcome these limitations, money emerged as a universally accepted medium of exchange. Over time, money evolved from commodities like cattle and grains to metallic coins, paper currency, bank deposits, and digital payments.

Thus, money has become the foundation of modern economic systems and plays a vital role in economic development.

Meaning of Money

Money refers to anything that is generally accepted by people as payment for goods and services and for the settlement of debts.

In simple words, money is anything that people are willing to accept in exchange for goods and services because they know others will also accept it.

Definitions of Money

According to **Crowther**

"Money is anything that is generally acceptable as a means of exchange and at the same time acts as a measure and store of value."

This definition highlights three important functions of money:

- Medium of exchange
- Measure of value
- Store of value

According to **Walker**

"Money is what money does."

Walker believed that money should be understood by the functions it performs rather than by its physical form.

According to **Kent**

"Money is anything that is commonly used and generally accepted as a medium of exchange or standard of value."

These definitions clearly indicate that the essence of money lies in its acceptability and usefulness in economic transactions.

Concept of Money

The concept of money has undergone significant changes throughout history. Initially, money was viewed only as coins and currency notes. However, in modern economics, money includes any asset that performs the functions of money and is generally accepted by society.

Money is not valuable because of the paper or metal from which it is made. Rather, it derives value from people's trust and confidence that it will be accepted by others in exchange for goods and services.

EVOLUTION OF MONEY

Barter System

The barter system was the earliest method of exchange where goods were directly exchanged for other goods. For example, a farmer could exchange wheat for cloth. However, barter required a double coincidence of wants, meaning both parties needed what the other offered. It lacked a common measure of value and made saving difficult. These problems led to the emergence of money.

Commodity Money

Commodity money refers to goods that were used as money because they had intrinsic value. Items such as cattle, salt, tobacco, and grains were commonly used. People accepted them because they were useful and valuable. Commodity money reduced some problems of barter but had limitations such as lack of uniformity and difficulty in transportation. Therefore, more efficient forms of money developed.

Metallic Money

Metallic money consisted of coins made from gold, silver, copper, and other metals. These metals were durable and easily divisible. Coins had a standardized value which facilitated trade and commerce. Metallic money was widely accepted and could be stored for long periods. However, carrying large quantities of metal coins was inconvenient.

Paper Money

Paper money consists of currency notes issued by the central bank or government. It is lightweight, portable, and easy to use in daily transactions. Paper money carries legal backing and public trust. It significantly reduced the burden of carrying heavy metallic coins. Today, paper currency remains an important component of the monetary system.

Plastic Money

Plastic money refers to credit cards, debit cards, and ATM cards used for payments. It reduces the need to carry cash and provides convenience. Transactions can be completed quickly and securely. Plastic money is widely used in shopping malls, restaurants, and online purchases. It has become an essential part of modern banking.

Digital Money

Digital money exists in electronic form and is used through mobile phones and computers. Examples include UPI, PhonePe, Google Pay, and Paytm. It allows instant transfer of funds from one account to another. Digital money promotes cashless transactions and financial inclusion. It is becoming increasingly popular in the digital economy.

FUNCTIONS OF MONEY

i) Primary Functions

1. Medium of Exchange

The most important function of money is to serve as a medium of exchange. People exchange goods and services for money instead of directly exchanging goods with each other. This eliminates the problems of the barter system. Money makes buying and selling easier and faster. It promotes specialization and trade. Therefore, money acts as a bridge between buyers and sellers.

2. Measure of Value

Money serves as a common standard for measuring the value of all goods and services. Prices of different commodities are expressed in monetary terms. This makes comparison between products easy. Businesses use money to maintain accounts and calculate profits. It simplifies economic calculations and record-keeping. Therefore, money acts as a unit of account.

ii) Secondary Functions

3. Store of Value

Money enables people to save a part of their income for future use. Instead of storing goods, individuals can store wealth in the form of money. This function provides financial security during emergencies. Savings can also be used for future investments. Although inflation may reduce purchasing power, money remains an important store of value. Thus, money helps preserve wealth over time.

4. Standard of Deferred Payments

Many economic transactions involve future payments. Money provides a standard for settling debts and obligations at a later date. Loans, mortgages, and credit sales depend on this function. Both borrowers and lenders trust money as a means of future payment. It promotes the growth of credit markets and banking. Therefore, money serves as a standard of deferred payments.

5. Transfer of Value

Money allows wealth to be transferred easily from one person to another and from one place to another. Modern banking and digital payment systems make this process simple and fast. Individuals can send money across cities and countries within minutes. This function supports domestic and international trade. It also promotes economic integration. Hence, money facilitates the transfer of value.

iii) Contingent Functions

6. Basis of Credit

The modern credit system is based on money. Banks provide loans and advances using monetary resources. Businesses and individuals depend on credit for investment and consumption. The availability of money encourages economic growth. Credit creation would not be possible without money. Therefore, money acts as the basis of the credit system.

7. Distribution of National Income

Money helps distribute income among different factors of production. Landowners receive rent, workers receive wages, capital owners receive interest, and entrepreneurs receive profits. These payments are made in monetary terms. Money makes income distribution simple and efficient. It also helps measure earnings accurately. Therefore, money plays an important role in income distribution.

8. Maximization of Satisfaction

Money gives consumers the freedom to spend according to their preferences. People can purchase goods and services that provide maximum satisfaction. Different individuals have different needs and priorities. Money allows them to allocate resources accordingly. This improves consumer welfare and utility. Therefore, money helps maximize satisfaction.

9. Measurement of Economic Performance

Economic activities are measured in monetary terms. Indicators such as GDP, national income, inflation, and per capita income use money as a measuring unit. This helps economists evaluate economic progress. Governments also use monetary data for policy formulation. Comparisons across regions and countries become easier. Thus, money is an important tool for measuring economic performance.

CHARACTERISTICS OF GOOD MONEY

General Acceptability

A Good money must be accepted by all members of society. People should have confidence in its value and purchasing power. Universal acceptance facilitates smooth transactions. It eliminates uncertainty in exchange. Therefore, acceptability is an essential characteristic of money.

Durability

Money should be capable of lasting for a long period without deterioration. Currency and coins must withstand regular handling. Durable money reduces replacement costs. It also maintains public confidence. Hence, durability is necessary for an effective monetary system.

Portability

Money should be easy to carry from one place to another. Large transactions should be possible without difficulty. Portable money enhances convenience and mobility. It supports trade and travel. Therefore, portability is an important feature of good money.

Divisibility

Money should be divisible into smaller units for making payments of different values. Divisibility enables both small and large transactions. It increases flexibility in exchange. Consumers can pay the exact price of goods and services. Thus, divisibility improves the efficiency of money.

Uniformity

Every unit of money should be identical in quality and value. Uniformity prevents confusion and disputes during transactions. It promotes trust and confidence in the monetary system. Standardized currency facilitates trade. Hence, uniformity is a desirable characteristic of money.

Recognizability

Money should be easily identifiable by the public. People must be able to distinguish genuine currency from counterfeit currency. Recognizable money reduces fraud and misuse. It strengthens public confidence. Therefore, easy identification is essential.

Stability of Value

The value of money should remain reasonably stable over time. Frequent fluctuations reduce purchasing power and create uncertainty. Stable money encourages saving and investment. It also promotes economic growth. Hence, stability is a vital feature of good money.

Scarcity

Money should not be excessively abundant or too scarce. Excess supply causes inflation, while insufficient supply restricts economic activity. Proper control of money supply ensures economic stability. Therefore, scarcity must be maintained appropriately.

CONCEPT OF MONEY

The concept of money refers to anything that is generally accepted as payment for goods and services. It includes currency notes, coins, and demand deposits in banks. Money acts as a medium of exchange, measure of value, and store of wealth. It is backed by public confidence and legal authority. The concept of money has evolved continuously with economic development.

NEAR MONEY

Meaning of Near Money

Near money refers to financial assets that can be quickly converted into cash but are not directly used as money. They possess high liquidity and are close substitutes for money. Near money assets help individuals maintain financial flexibility. They are widely used for investment and savings purposes. Thus, near money complements the monetary system.

Examples of Near Money

Fixed Deposits

Fixed deposits are bank deposits held for a specific period. They earn interest and provide safety to investors. Although they cannot be used directly for purchases, they can be converted into cash. Fixed deposits are highly liquid and popular among savers. Therefore, they are considered near money.

Treasury Bills

Treasury bills are short-term government securities issued to meet temporary financial needs. They are considered highly secure investments. Investors can easily convert them into cash in financial markets. Treasury bills offer liquidity and safety. Hence, they are classified as near money.

Government Securities

Government securities are financial instruments issued by the government to borrow funds. They provide regular returns and low risk. These securities can be sold in the market before maturity. Their easy convertibility into cash makes them near money assets. They are widely used by investors and institutions.

Bonds

Bonds are debt instruments issued by governments and corporations. They pay periodic interest and return the principal amount at maturity. Bonds can be traded in financial markets. Investors can convert them into cash when needed. Therefore, bonds are considered near money.

Commercial Papers

Commercial papers are short-term unsecured promissory notes issued by large companies. They are used to meet working capital requirements. These instruments are highly liquid and can be sold in money markets. Commercial papers provide returns to investors. Hence, they are included under near money.

Difference Between Money and Near Money

Money

Money is directly accepted as payment for goods and services. It possesses perfect liquidity and can be used immediately for transactions. Currency notes, coins, and demand deposits are examples of money. It performs all functions of money directly. Therefore, money is the most liquid asset in the economy.

Near Money

Near money cannot be directly used for purchasing goods and services. It must first be converted into cash or demand deposits. Examples include fixed deposits, treasury bills, and bonds. Although highly liquid, near money is less liquid than actual money. Therefore, it serves as a close substitute rather than a direct medium of exchange.

Conclusion

Money is the backbone of a modern economy because it facilitates exchange, measures value, stores wealth, and supports future payments. Its development has transformed economic life and made trade more efficient. Near money complements money by providing liquidity and investment opportunities. Together, money and near money contribute to economic growth, financial stability, and efficient functioning of markets. Hence, both are indispensable components of the modern financial system.

Demand for Money: Objectives, Classical Economists' View, Keynesian View, and Factors Affecting Demand for Money

Demand for Money

The demand for money represents the desire of households and businesses to hold assets in a form that can be exchanged easily for goods and services. It should also be kept in mind that demand for money increases with increase in income levels. There are three approaches of demand for money, which are as follows:

Classical approach

Keynesian approach

Classical Approach

The classical economists did not put forward any theory on demand for money but their views are manifested in the quantity theory of money. They emphasised the transactions demand for money in terms of the velocity of circulation of money. They based their view on the medium of exchange function of money. According to the exchange equation given by Fisher. $MV = P.T$

Where, M = Money supply

V, Velocity of money in circulation

P = Price level

T = The number of transactions undertaken per period

According to the equation, price level (P) multiplied by the number of transactions undertaken per period (T) gives the total demand for money. This equals the total supply of money in the community consisting of the quantity of actual money (M) and its velocity of circulation (V).

Assumptions of Classical Theory of Demand for Money

1. Full Employment

The classical economists assumed that all resources in the economy are fully employed. There is no unemployment, and everyone who wants to work gets a job. Therefore, the economy always operates at its maximum production capacity.

2. Velocity of Money is Constant

They assumed that the speed at which money circulates in the economy remains constant. People spend money in a regular and predictable manner, so the velocity of money does not change significantly.

3. Money is Held Only for Transactions

According to classical economists, people demand money only to buy and sell goods and services. They do not hold money for emergencies or speculative purposes.

4. Interest Rate Does Not Affect Money Demand

The theory assumes that the demand for money is independent of the rate of interest. People hold money only for transactions and are not influenced by returns on bonds or other assets.

5. Stable Economic Conditions

The classical theory assumes that economic conditions remain stable. There are no sudden changes in expectations, business activities, or financial markets.

Criticisms of Classical Theory of Demand for Money:

1. Ignores Precautionary Motive

The theory assumes that people hold money only for transactions. In reality, people also keep money for emergencies such as illness, accidents, or unexpected expenses.

2. Ignores Speculative Motive

Classical economists overlooked the fact that people may hold money to take advantage of future changes in interest rates and bond prices. Keynes considered this an important reason for holding money.

3. Interest Rate Plays an Important Role

The theory assumes that interest rates do not affect money demand. However, in reality, people often decide between holding money and investing in interest-bearing assets based on the rate of interest.

4. Velocity of Money is Not Constant

The speed of circulation of money changes due to technological developments, banking habits, and economic conditions. Therefore, the assumption of constant velocity is unrealistic.

5. Unrealistic Assumption of Full Employment

In the real world, unemployment often exists. Economies do not always operate at full employment, especially during recessions and economic crises.

6. Ignores Uncertainty

The theory does not consider uncertainty about future income, prices, or economic conditions. Such uncertainty strongly influences people's desire to hold money.

7. Money is More Than a Medium of Exchange

The classical theory treats money only as a medium of exchange. In reality, money also acts as a store of value and a means of preserving wealth.

8. Less Suitable for Modern Economies

Modern economies have developed financial markets, banking systems, and investment opportunities. Therefore, the classical theory cannot fully explain the demand for money in today's economic environment.

Keynesian Approach

JM Keynes laid stress on the store of value function of money. Keynes used another term for demand for money which he called 'Liquidity Preference'. Liquidity preference means the desire of the public to hold cash.

Liquidity preference of a particular individual arises because of three motives

The transaction motive.

The precautionary motive.

The speculative motive.

i) Transaction Motive

The transaction motive relates to the demand for money for the current transactions of individuals and business firms. In other words, people hold money or cash balances for transaction purposes, ie. for the purpose of buying goods and services. The higher the price level, the more money a person has to hold in order to purchase a given quantity of goods.

The transaction motive for demand for money is a function of income and is represented as Where,

$$M_1 = f(Y)$$

M_1 = Transaction demand for money

f = Functional relationship

Y = Income

ii) Precautionary Motive

The precautionary motive represents the desire of the public to hold money to provide for contingencies requiring sudden expenditure. People hold a certain amount of money to provide for the danger of unemployment, sickness, accidents and other uncertain perils.

The precautionary motive of demand for money is also a function of money and is represented as Where, $M_1 = f(Y)$

M_1 = Precautionary demand for money

f = Functional relationship

Y = Income

iii) Speculative Motive

The speculative motive giving rise to the speculative demand for money is the most important contribution Keynes made to the theory of the demand for money. This motive of the people relates to the desire to hold one's resources in liquid form in order to take advantage of market movements regarding the future changes in the rate of interest (or bond prices). Demand for money is uncertain and variable under speculative demand.

It is shown as

$$M_2 = f(r)$$

Where, M_2 = Speculative demand for money

f = Functional relationship

r = Rate of interest

Assumptions of Keynes' Demand for Money Theory (Liquidity Preference Theory)

1. People Prefer Liquidity

Keynes assumed that people prefer to keep a part of their wealth in the form of money because money is the most liquid asset. It can be used immediately for making payments and meeting emergencies.

2. Wealth Can Be Held in Money or Bonds

Individuals can hold their wealth either as money or as bonds. The choice depends on the expected return from bonds and the desire to maintain liquidity.

3. Interest Rate Influences Money Demand

Keynes assumed that the speculative demand for money depends on the rate of interest. People compare the benefits of holding money with the returns from bonds.

4. Future Interest Rates are Uncertain

People form expectations about future interest rates. These expectations influence their decision to hold money or invest in bonds.

5. Demand for Money Arises from Three Motives

People demand money for transaction, precautionary, and speculative motives. These motives together determine the total demand for money.

Criticisms of Keynes' Demand for Money Theory

1. Too Much Emphasis on Interest Rate

Critics argue that Keynes gave excessive importance to interest rates in determining speculative demand for money. Other factors such as wealth and expectations also affect money demand.

2. Difficult to Measure Speculative Demand

Speculative demand depends on individual expectations about future interest rates, which are difficult to measure accurately in practice.

3. Neglects Other Financial Assets

Keynes considered mainly money and bonds as alternatives. In modern economies, people can also invest in shares, mutual funds, and other financial assets.

4. Liquidity Trap is Rare

Some economists argue that the liquidity trap situation is uncommon and does not occur frequently in real economies.

5. Empirical Evidence is Limited

Certain studies have found that the relationship between interest rates and money demand is not always as strong as Keynes suggested.

6. Ignores Wealth as an Important Determinant

Keynes focused mainly on income and interest rates but paid less attention to wealth, which also affects the demand for money.

Why is Keynes' Theory of Demand for Money Superior to the Classical Theory?

According to H.L. Ahuja, Keynes' theory is considered superior because it provides a more realistic and comprehensive explanation of why people hold money. The main points are:

1. Considers More Motives for Holding Money

The classical economists believed that money is demanded only for transaction purposes. Keynes explained that people hold money for **transaction, precautionary, and speculative motives**, making his theory more realistic.

2. Recognizes the Role of Interest Rate

Classical theory ignores the effect of interest rates on money demand. Keynes showed that the demand for money, especially speculative demand, is greatly influenced by changes in the rate of interest.

3. Treats Money as a Store of Wealth

According to classical economists, money is merely a medium of exchange. Keynes recognized that people also hold money as a form of wealth and as an alternative to bonds and other assets.

4. Includes Uncertainty and Expectations

Keynes' theory considers uncertainty about the future and people's expectations regarding interest rates. The classical theory assumes certainty and stable economic conditions.

5. Explains Liquidity Preference

Keynes introduced the concept of **liquidity preference**, which explains why people prefer to keep money in liquid form. This concept is absent in classical theory.

6. More Useful for Monetary Policy

Since Keynes' theory explains how interest rates affect money demand, it helps governments and central banks formulate effective monetary policies. The classical theory provides little guidance in this area.

7. More Suitable for Modern Economies

Modern economies have developed financial markets, banking systems, and investment opportunities. Keynes' theory takes these realities into account, whereas the classical theory is too simplistic.

8. Explains Economic Fluctuations Better

Keynes' theory helps explain changes in investment, interest rates, and economic activity during booms and recessions. The classical theory fails to adequately explain such fluctuations.

Factors Affecting Demand for Money

1. Level of Income

Income is the most important determinant of demand for money. As people's income increases, their expenditure on goods and services also increases. Therefore, they need to hold more money for transaction and precautionary purposes. Thus, demand for money is directly related to income.

2. Price Level

When the general price level rises, people require more money to purchase the same quantity of goods and services. As a result, the demand for money increases. Conversely, a fall in prices reduces the demand for money.

3. Rate of Interest

The rate of interest affects mainly the speculative demand for money. When interest rates are high, people prefer to invest in bonds and other interest-bearing assets, reducing money demand. When interest rates are low, people tend to hold more money.

4. Volume of Transactions

The greater the number of economic transactions in an economy, the greater is the need for money. An increase in business activities and trade leads to a higher demand for money for making payments and purchases.

5. Wealth

People with greater wealth usually hold larger cash balances. An increase in wealth increases both transaction and precautionary demand for money. Therefore, money demand tends to rise with wealth.

6. Precautionary Considerations

People often keep money to meet unforeseen emergencies such as illness, accidents, or sudden expenses. When uncertainty increases, individuals and businesses hold more money as a safety reserve.

7. Expectations About Future Interest Rates

If people expect interest rates to rise in the future, they may prefer to hold money rather than bonds to avoid capital losses. Such expectations increase speculative demand for money.

8. Availability of Credit Facilities

When banking and credit facilities are easily available, people do not need to keep large cash balances. They can borrow money whenever necessary. Therefore, easy credit facilities reduce the demand for money.

9. Banking Habits and Financial Development

The development of banks, ATMs, online banking, credit cards, and digital payments reduces the need to hold cash. Improved financial facilities can therefore lower the demand for money balances.

10. Business Conditions- During periods of economic prosperity, income and trade increase, leading to a higher demand for money. During recessions, economic activity slows down and the demand for money may decline.

11. Population Growth- An increase in population generally leads to more economic transactions and higher consumption. As a result, the overall demand for money in the economy increases.

12. Distribution of Income-The pattern of income distribution affects money demand. When income is widely distributed among people, spending and transactions increase, resulting in a greater demand for money.

Money supply: component of money supply- factor affecting money supply

Meaning of Money Supply

Money supply refers to the total stock of money available in an economy at a particular point of time. It includes all forms of money that are readily available for spending on goods and services. According to H.L. Ahuja, money supply consists of currency held by the public and deposits held in commercial banks that can be used as money.

Money supply is an important concept in monetary economics because it influences consumption, investment, production, employment, and the general price level. An increase in money supply generally increases spending and economic activity, whereas a decrease in money supply may reduce economic activity.

In simple words, money supply means the total amount of money that people can use for making payments and carrying out economic transactions.

Definitions

According to **H.L. Ahuja**:

"Money supply is the total quantity of money available to the public in an economy at a given time."

The money supply includes money in the hands of the public and money held in bank accounts that can easily be converted into cash.

Components of Money Supply

The money supply consists of different components. These components represent various forms in which money exists in an economy.

1. Currency Held by the Public

Currency held by the public includes notes and coins that people keep with themselves for making daily transactions. It is the most liquid form of money because it can be used directly for payments. Cash held by banks is not included in this component.

2. Demand Deposits with Commercial Banks- Demand deposits are bank deposits that can be withdrawn at any time without prior notice. These include current account and savings account deposits. Since they can be used through cheques, UPI, debit cards, and online transfers, they form an important part of the money supply.

3. Time Deposits with Commercial Banks

Time deposits are deposits kept in banks for a fixed period, such as fixed deposits (FDs) and recurring deposits (RDs). They are less liquid than demand deposits because they cannot be withdrawn immediately. They are included in broader measures of money supply.

4. Other Deposits with RBI

These are deposits held with the Reserve Bank of India by certain financial institutions and international organizations. Although they form a small part of the money supply, they are included in the broader monetary aggregates used by the RBI.

Measures of Money Supply in India

The Reserve Bank of India has classified money supply into four measures:

M1 (Narrow Money)

M1 consists of:

- Currency with the public
- Demand deposits with banks
- Other deposits with RBI

Formula:

$$M1 = \text{Currency with Public} + \text{Demand Deposits with Banks} + \text{Other Deposits with RBI}$$

This is the most liquid measure of money supply.

M2

$$M2 = M1 + \text{Savings Deposits with Post Office Savings Banks}$$

It is broader than M1.

M3 (Broad Money)

$$M3 = M1 + \text{Time Deposits with Commercial Banks}$$

This is the most commonly used measure of money supply in India.

M4

$$M4 = M3 + \text{Total Post Office Deposits}$$

This is the broadest measure of money supply.

Factors Affecting Money Supply

1. Monetary Policy of the Central Bank

The central bank controls money supply through various monetary policy instruments such as the bank rate, repo rate, reserve requirements, and open market operations.

When the central bank follows an expansionary monetary policy, money supply increases. When it adopts a contractionary policy, money supply decreases.

Example:

A reduction in the repo rate encourages banks to lend more, increasing money supply.

2. Reserve Ratio (CRR and SLR)

Commercial banks are required to keep a certain percentage of deposits as reserves.

When reserve requirements increase, banks have less money available for lending, reducing money supply.

When reserve requirements decrease, banks can create more credit, increasing money supply.

Example:

A lower Cash Reserve Ratio (CRR) increases banks' lending capacity.

3. Credit Creation by Commercial Banks

Commercial banks create money through the process of lending.

When banks provide loans, new deposits are created, increasing money supply.

The greater the lending activity of banks, the greater is the expansion of money supply.

4. Currency-Deposit Ratio of the Public

People may hold their wealth either as cash or as bank deposits.

When people prefer to hold more cash, banks receive fewer deposits and their ability to create credit decreases.

Consequently, money supply grows more slowly.

5. Excess Reserves of Banks

Banks may keep reserves beyond the legally required minimum.

Higher excess reserves reduce lending and credit creation, thereby reducing money supply.

Lower excess reserves increase lending and money supply.

6. Open Market Operations

The central bank buys and sells government securities in the market.

When securities are purchased by the central bank, money flows into the economy and money supply increases.

When securities are sold, money is withdrawn from circulation and money supply decreases.

7. Bank Rate and Repo Rate

The bank rate and repo rate influence the cost of borrowing by commercial banks.

Lower rates encourage banks to borrow and lend more, increasing money supply.

Higher rates discourage borrowing and reduce money supply.

8. Government Borrowing and Expenditure

Government spending injects money into the economy.

Large government expenditure generally increases money supply, while higher taxation may reduce disposable income and slow money circulation.

9. Economic Activity

During periods of economic growth, demand for credit increases.

Banks expand lending and create more deposits, leading to an increase in money supply.

During recessions, credit demand falls and money supply growth slows.

10. Public's Banking Habits

The greater the use of banking services, the larger the volume of deposits available for credit creation.

Improved banking habits and financial inclusion increase money supply through greater deposit mobilization.

Quantity Theory of Money: Cash Transaction Approach-Cash Balance Approach- Keynesian Reformulation Approach-Milton Friedman's Approach

Introduction

The Quantity Theory of Money explains the relationship between the quantity of money and the general price level in an economy. The theory states that changes in the money supply directly influence the price level and the value of money.

Over time, different economists developed different versions of the Quantity Theory of Money. The four important approaches discussed by H.L. Ahuja are:

1. Cash Transaction Approach (Irving Fisher)
2. Cash Balance Approach (Cambridge Economists)
3. Keynesian Reformulation
4. Milton Friedman's Modern Quantity Theory

1. Cash Transaction Approach (Irving Fisher)

The Cash Transaction Approach was developed by Irving Fisher.

According to Fisher, the value of money depends on the quantity of money in circulation. If the money supply increases, prices rise, and if money supply decreases, prices fall. Money is mainly used for buying and selling goods and services.

Fisher's Equation of Exchange

$$MV=PT \quad MV = PT \quad MV=PT$$

Where:

- M = Quantity of Money
- V = Velocity of Circulation of Money
- P = General Price Level
- T = Total Volume of Transactions

The equation states that the total money spent (MV) is equal to the total value of goods and services exchanged (PT).

Explanation

If the quantity of money increases while V and T remain constant, the price level will rise proportionately.

For example, if money supply doubles, prices will also double.

Thus, Fisher concluded that there is a direct and proportional relationship between money supply and price level.

Assumptions of the theory:

1. Full Employment

The economy always operates at full employment. All resources are fully utilized, and there is no involuntary unemployment.

2. Velocity of Money is Constant

The speed at which money circulates remains stable and does not change frequently.

3. Volume of Transactions is Constant

The total quantity of goods and services exchanged remains unchanged in the short run.

4. Money is Held Only for Transactions

People keep money only for purchasing goods and services and not for other purposes.

Criticisms of the theory:

1. Unrealistic Full Employment Assumption

In reality, unemployment exists in most economies, making this assumption unrealistic.

2. Velocity is Not Constant

The speed of money circulation changes due to technology, banking habits, and economic conditions.

3. Ignores Demand for Money

The theory focuses only on money supply and neglects why people hold money.

4. Ignores Interest Rate

Interest rates influence money demand, but Fisher's theory does not consider this factor.

2. Cash Balance Approach (Cambridge Approach)

The Cash Balance Approach was developed by the Cambridge economists such as Alfred Marshall, A.C. Pigou, and D.H. Robertson.

Unlike Fisher, the Cambridge economists focused on the demand for money rather than the supply of money. The demand for money depends on how much money people wish to keep with them. According to them, people hold a part of their income in the form of cash balances.

Cambridge Equation

$$M = kPYM = kPYM = kPY$$

Where:

- M = Money Supply
- k = Fraction of Income Held as Cash
- P = Price Level
- Y = Real National Income

Explanation

The equation shows that people hold a certain proportion of their income as money.

If people decide to hold larger cash balances, the value of money increases and prices fall.

If people reduce their cash holdings, prices rise.

Thus, the Cambridge approach emphasizes money demand rather than money transactions.

Assumptions of the theory:

1. Constant Cash Balance Ratio (k)

People keep a fixed proportion of their income as cash balances.

2. Stable Income Level

National income remains stable during the period under consideration.

3. Full Employment

The economy is assumed to be operating at full employment.

Criticisms of the theory:

1. Cash Balance Ratio is Not Constant

People change their cash holdings according to economic conditions and expectations.

2. Interest Rate Ignored

The theory does not explain how interest rates affect the demand for money.

3. Speculative Motive Ignored

People may hold money for investment opportunities, which this theory fails to explain.

3. Keynesian Reformulation of Quantity Theory

John Maynard Keynes criticized the traditional quantity theory and reformulated it.

According to Keynes, the relationship between money supply and prices is not direct and proportional.

Changes in money supply first affect interest rates, then investment, output, employment, and finally prices.

Keynesian Transmission Mechanism

Money Supply ↑
→ Interest Rate ↓
→ Investment ↑
→ Employment ↑
→ Output ↑
→ Income ↑
→ Prices ↑

Explanation

When money supply increases:

1. Interest rates fall.
2. Investment increases.
3. Production expands.
4. Employment rises.
5. National income increases.
6. Prices rise only after full employment is reached.

Therefore, Keynes argued that an increase in money supply does not always lead to inflation.

Assumptions of the theory:

1. Unemployment Exists

The economy may not always operate at full employment, and unemployed resources may be available.

2. Investment Depends on Interest Rate

A fall in interest rates encourages businesses to invest more.

3. Prices are Flexible Only After Full Employment

Prices rise significantly only when the economy reaches full employment.

Criticisms of the theory:

1. Too Much Importance to Interest Rate

Investment decisions depend on many factors, not only interest rates.

2. Complex Theory

The relationship between money supply, investment, and prices is difficult to measure accurately.

3. Inflation Not Fully Explained

The theory does not clearly explain inflation during all economic situations.

4. Milton Friedman's Modern Quantity Theory of Money

The modern quantity theory was developed by Milton Friedman. Friedman revived the quantity theory by treating money as one form of wealth among many assets.

According to Friedman, people hold money just as they hold bonds, shares, land, and other assets.

Friedman's Demand Function

The demand for money depends on:

- Income
- Wealth
- Expected inflation
- Returns on bonds
- Returns on shares
- Preferences of individuals

According to Friedman, the demand for money is stable and predictable.

Main Features

1. Money is a form of wealth.
2. Demand for money is stable.
3. Permanent income influences money demand.
4. Changes in money supply significantly affect prices and income.

Permanent Income Concept

Friedman emphasized permanent income rather than current income.

Permanent income refers to the average expected income over a long period.

People make decisions based on long-term expected income rather than temporary income changes.

Merits

- More comprehensive than earlier theories.
- Includes wealth and expectations.
- Supported by empirical studies.
- Useful in monetary policy analysis.

Assumptions of the theory:

1. Demand for Money is Stable

People's desire to hold money does not change drastically over short periods.

2. People Hold Different Assets

Individuals divide their wealth among money, bonds, shares, and other assets.

3. Permanent Income Matters

People make spending and saving decisions based on their long-term expected income.

Criticisms of the theory:

1. Permanent Income is Difficult to Measure

It is not easy to estimate a person's long-term expected income accurately.

2. Demand for Money May Not Always be Stable

Economic crises and financial innovations can change money demand.

3. Other Factors Also Affect the Economy

The theory gives excessive importance to money supply and may underestimate other economic influences.