# **Money Banking Finance**

Mid Dates	@March 18, 2023
■ Mid Time	09.00am - 10.30am
Final Dates	
≡ Final Time	

# **▼** <u>Definition of money</u>

Money can be defined as a **medium of exchange** that is **widely accepted** in transactions for **goods** and **services**, as well as for the **settlement of debts**. It can take various forms, including **currency notes and coins, bank deposits, and electronic funds transfers**. Money serves as a unit of account, a store of value, and a standard of deferred payment, enabling individuals and businesses to engage in economic transactions and manage their financial affairs. It is a fundamental concept in economics, and its role and functions have been studied extensively by economists and monetary theorists.

# **▼** *Different types of money*

There are several different types of money that can be used as a medium of exchange in economic transactions. Here are some of the most common types:

- 1. Physical Currency: This includes coins and banknotes issued by central banks and governments, such as the US dollar, euro, yen, and pound sterling.
- 2. Demand Deposits: These are bank deposits that can be withdrawn on demand, usually through checks, debit cards, or electronic transfers. Demand deposits are also known as checking or current accounts.
- 3. Time Deposits: These are bank deposits that cannot be withdrawn before a specified maturity date without incurring a penalty. Time deposits are also known as savings accounts, fixed deposits, or certificates of deposit.
- 4. Digital Currency: This refers to electronic money that is stored and transmitted through digital devices and computer networks, such as Bitcoin, Ethereum, and Litecoin.
- 5. Commodity Money: This refers to money that has intrinsic value based on the material it is made of, such as gold, silver, or copper.
- 6. Fiat Money: This refers to money that has no intrinsic value but is accepted by law as a means of payment, such as paper currency issued by central banks.
- 7. Commercial Bills: These are negotiable instruments issued by businesses to finance their trade activities. Commercial bills are typically short-term and can be bought and sold in the secondary market.

Each type of money has its own advantages and disadvantages, and their usage and acceptance can vary depending on the economic and financial context.

# ▼ Functions of money

Money serves several important functions in an economy. Here are the main functions of money:

1. Medium of exchange: Money is used as a medium of exchange to facilitate transactions between buyers and sellers of goods and services. It eliminates the need for barter, where goods are exchanged directly for other

goods, and allows for more efficient and convenient exchange.

- 2. Unit of account: Money serves as a unit of account, providing a standard measure for the value of goods and services. Prices are quoted in monetary units, making it easier to compare the relative values of different goods and services.
- 3. Store of value: Money can be used as a store of value, allowing individuals and businesses to save and accumulate wealth over time. Money that is not spent immediately can be saved and invested for future use.
- 4. Standard of deferred payment: Money can be used as a standard of deferred payment, allowing for the payment of debts and obligations over time. Loans, mortgages, and other financial transactions are typically denominated in monetary units.
- 5. Means of exchange in financial markets: Money can be used as a means of exchange in financial markets, allowing for the buying and selling of stocks, bonds, and other financial instruments.

Overall, the functions of money help to facilitate economic activity and provide a stable and efficient means of conducting transactions and managing financial affairs.

# **▼** Concept of money and near money

Money refers to any asset that can be used as a medium of exchange, store of value, and unit of account in economic transactions. Examples of money include cash, bank deposits, and other highly liquid financial assets that can be readily exchanged for goods and services.

Near money, on the other hand, refers to assets that are not themselves money, but can be easily converted into money. These assets are highly liquid, but not as widely accepted as a medium of exchange as money itself. Examples of near money include savings accounts, money market funds, and other short-term financial assets that can be easily converted into cash.

The distinction between money and near money is important in understanding the overall liquidity of an economy. Money is the most liquid asset, as it can be used directly in transactions without any additional conversion. Near money is less liquid, but still highly accessible and can be quickly converted into cash.

The concept of near money is important for investors and policymakers, as it can affect the overall liquidity and stability of financial markets. Large holdings of near money can signal a preference for liquidity and suggest potential shifts in economic activity, while a shortage of near money can create financial instability and reduce economic growth.

#### **▼** Money supply

The money supply refers to the total amount of money in circulation in an economy. It includes all forms of money, such as physical currency, demand deposits, time deposits, and other highly liquid financial assets.

The money supply is an important measure of the overall health of an economy, as it affects the level of economic activity and inflation. An increase in the money supply can lead to higher levels of economic activity and inflation, while a decrease can have the opposite effect.

The money supply is typically measured by central banks, which have the authority to control the amount of money in circulation through various monetary policy tools, such as open market operations, reserve requirements, and interest rate policies. Central banks can use these tools to adjust the money supply in response to changing economic conditions, with the goal of maintaining price stability and promoting economic growth.

There are several different measures of the money supply, which are often classified into different categories based on their level of liquidity and accessibility. The most commonly used measures of the money supply include M0 (physical currency and coins), M1 (demand deposits, traveler's checks, and other highly liquid assets), M2 (M1 plus savings deposits, money market funds, and other less liquid assets), and M3 (M2 plus large time deposits and other long-term financial assets). The exact definitions and classifications of the money supply can vary between countries and over time, depending on the specific economic and financial context.

#### **▼** Different measures of money supply

There are several measures of the money supply, which are classified based on their liquidity and accessibility. Here are the most commonly used measures:

- 1. M0: This is the narrowest measure of the money supply and includes only physical currency and coins in circulation.
- 2. M1: This includes all of the components of M0, as well as demand deposits (checking accounts) and other highly liquid assets that can be easily used as a medium of exchange, such as traveler's checks.
- 3. M2: This includes all of the components of M1, as well as savings deposits, money market funds, and other less liquid assets that can be easily converted into cash.
- 4. M3: This includes all of the components of M2, as well as large time deposits and other long-term financial assets.

The exact components and definitions of these measures of the money supply can vary between countries and over time, depending on the specific economic and financial context. Central banks typically use these measures to assess the level of liquidity in the economy and to monitor changes in the supply of money, which can affect inflation, interest rates, and overall economic activity.

#### **▼** *Determinants of Money Supply*

The money supply is determined by a combination of factors, including:

- 1. Central bank policy: The central bank has the ability to influence the money supply through its monetary policy tools, such as open market operations, reserve requirements, and interest rate policies. For example, the central bank can purchase government bonds in open market operations, which injects money into the economy and increases the money supply.
- 2. Bank lending practices: The lending activities of commercial banks can also affect the money supply. When banks make loans, they create new deposits, which increases the money supply. Conversely, when loans are repaid or default, the money supply decreases.
- 3. Cash holdings: The amount of physical currency and coins held by individuals and businesses also affects the money supply. When more cash is held, the money supply decreases, while when cash is spent or deposited into banks, the money supply increases.
- 4. Economic activity: The level of economic activity and the demand for money also affect the money supply. When economic activity is high, there is typically more demand for money, and the money supply may need to increase to meet this demand.
- 5. Government policies: Government policies can also affect the money supply, particularly through fiscal policy measures such as government spending and taxation. For example, an increase in government spending can increase the money supply, while a decrease in taxation can decrease the money supply.

The exact contribution of each of these factors can vary depending on the economic context and the specific policies and practices of the central bank and commercial banks.

# **▼** <u>Demand for money and different theories</u>

The demand for money refers to the desire of individuals and businesses to hold money balances for transactional and speculative purposes. There are several theories that attempt to explain the factors that influence the demand for money, including:

- 1. Transaction demand theory: This theory posits that the demand for money is driven by the need to engage in day-to-day transactions, such as buying goods and services. The transaction demand for money is influenced by the level of economic activity, the frequency of transactions, and the level of prices.
- 2. Precautionary demand theory: This theory suggests that the demand for money is driven by the need to hold cash balances as a precaution against unexpected expenses or income fluctuations. The precautionary demand for money is influenced by the level of income and the degree of uncertainty in future income and expenses.
- 3. Speculative demand theory: This theory suggests that the demand for money is driven by the desire to hold cash balances as a speculative investment, rather than for transactional purposes. The speculative demand for money is influenced by interest rates, expected changes in asset prices, and risk preferences.
- 4. Liquidity preference theory: This theory, developed by economist John Maynard Keynes, combines the transaction, precautionary, and speculative motives for holding money into a single framework. According to this theory, the demand for money is influenced by the opportunity cost of holding money (i.e., the foregone interest that could have been earned by investing in other assets), as well as by the expected return on other assets and the level of risk aversion.

The relative importance of these different motives for holding money can vary depending on individual preferences, economic conditions, and other factors. The demand for money is an important concept in macroeconomics and monetary policy, as it affects the overall level of interest rates, the velocity of money circulation, and the overall level of economic activity.

#### **▼** *Quantity theory - Erwing Fischer*

The quantity theory of money is a fundamental concept in monetary economics, which states that the general level of prices in an economy is directly proportional to the quantity of money in circulation. One of the most famous versions of the quantity theory of money is the Fisher equation, named after American economist Irving Fisher.

The Fisher equation states that the nominal interest rate (i) is equal to the sum of the real interest rate (r) and the expected inflation rate ( $\pi$ ), or  $i = r + \pi$ . This equation suggests that changes in the quantity of money in circulation can affect the inflation rate and the nominal interest rate, which can have important implications for economic activity.

According to Fisher, changes in the money supply have a direct and proportional effect on the general level of prices in an economy. In other words, if the money supply increases by a certain percentage, the price level should increase by an equal percentage. This is known as the quantity theory of money.

Fisher also argued that changes in the money supply can have important distributional effects, as they can affect the relative prices of different goods and services. For example, if the money supply increases but the supply of goods and services remains constant, then prices will rise, which can benefit those who sell goods and services but can harm those who are on fixed incomes or who hold fixed-price assets.

The Fisher equation and the quantity theory of money have been subject to much debate and criticism, particularly in terms of their ability to accurately predict inflation and interest rates. However, they remain an important framework for understanding the relationship between money, prices, and economic activity.

#### **▼** *Keynesian theory/ liquidity theory*

The Keynesian liquidity preference theory is a macroeconomic theory that emphasizes the role of the demand for money as a determinant of interest rates and economic activity. The theory was developed by British economist John Maynard Keynes in the 1930s and is a key component of Keynesian economics.

According to the liquidity preference theory, individuals and businesses demand money (liquidity) for three reasons: transactions, precautionary, and speculative motives. The transactions motive refers to the demand for money to conduct day-to-day transactions, such as buying goods and services. The precautionary motive refers to the demand for money as a hedge against unexpected future expenses or income fluctuations. The speculative motive refers to the demand for money as an investment in anticipation of changes in the relative prices of different assets.

Keynes argued that the supply of money is determined by the central bank, while the demand for money is determined by the preferences of individuals and businesses. When the demand for money exceeds the supply, interest rates will rise, and economic activity will decline. Conversely, when the demand for money is less than the supply, interest rates will fall, and economic activity will increase.

Keynesian economists argue that monetary and fiscal policy can be used to manage the economy by influencing interest rates and aggregate demand. When interest rates are low, individuals and businesses are more likely to borrow money and invest in productive activities, which can lead to increased economic growth. Conversely, when interest rates are high, borrowing and investment are discouraged, which can lead to a decrease in economic activity.

Overall, the liquidity preference theory emphasizes the importance of managing the supply of money and interest rates in order to achieve full employment and stable economic growth.

#### **▼** What is liquidity, liquidity trap, theory of interest

Liquidity refers to the ease with which an asset can be converted into cash without incurring significant loss of value. In financial markets, liquidity is an important consideration because it affects the ability of buyers and sellers to quickly and efficiently trade assets.

A liquidity trap is a situation in which interest rates are so low that monetary policy becomes ineffective, and the economy experiences a prolonged period of slow growth or recession. In a liquidity trap, individuals and businesses hoard cash and other highly liquid assets because they believe that interest rates will remain low and that the economy will not improve significantly in the near future.

The theory of interest is a fundamental concept in macroeconomics that attempts to explain the relationship between the price of borrowing money (i.e., the interest rate) and the overall level of economic activity. According to the theory of interest, interest rates play a key role in coordinating the behavior of borrowers and lenders in the economy.

There are several theories of interest that attempt to explain the factors that determine interest rates, including:

- 1. Loanable funds theory: This theory suggests that interest rates are determined by the supply and demand for loanable funds (i.e., money available for borrowing). The supply of loanable funds comes from savings, while the demand for loanable funds comes from investment projects.
- Liquidity preference theory: This theory, developed by John Maynard Keynes, emphasizes the role of the demand for money as a determinant of interest rates. According to this theory, individuals and businesses demand money (liquidity) for three reasons: transactions, precautionary, and speculative motives. The supply of

money is determined by the central bank, while the demand for money is determined by the preferences of individuals and businesses.

3. Market expectations theory: This theory suggests that interest rates are determined by the expectations of borrowers and lenders about future inflation rates and economic growth. If borrowers and lenders expect inflation to be high in the future, they will demand higher interest rates to compensate for the loss of purchasing power.

Overall, the theory of interest is an important concept in macroeconomics that helps to explain the behavior of borrowers and lenders in the economy, as well as the role of monetary policy in managing economic activity.

# ▼ Types of Banks

There are several types of banks, each with its own unique characteristics and functions. Here are some of the most common types of banks:

- 1. Commercial Banks: These are the most common type of banks, which provide a range of financial services to individuals and businesses. Commercial banks accept deposits, make loans, and offer various types of accounts, such as checking and savings accounts.
- 2. Investment Banks: These banks primarily work with businesses and government entities to provide financial advice, underwrite and sell securities, and manage mergers and acquisitions.
- 3. Central Banks: These banks are responsible for managing a country's monetary policy and regulating the banking industry. Central banks often hold the power to issue currency and set interest rates.
- 4. Retail Banks: These banks provide services to individual customers, such as personal loans, mortgages, and credit cards.
- 5. Savings and Loans Associations: These banks primarily provide loans for home mortgages and other types of consumer loans.
- 6. Credit Unions: These are non-profit financial institutions that are owned by their members. They typically offer savings accounts, checking accounts, and loans at lower interest rates than commercial banks.
- 7. Online Banks: These banks operate exclusively online, with no physical branch locations. They typically offer higher interest rates on deposits and lower fees than traditional banks.
- 8. Private Banks: These banks provide financial services to high-net-worth individuals and families, such as investment management and estate planning.

Overall, each type of bank serves a unique purpose and provides different financial services to meet the needs of individuals and businesses.

#### ▼ Meaning of Commercial banks

Commercial banks are financial institutions that accept deposits from customers and provide various financial services, such as making loans, issuing credit cards, and facilitating money transfers. They are for-profit institutions that aim to generate profits for their shareholders while providing valuable services to their customers.

Commercial banks offer a wide range of services, including:

1. Deposit accounts: They offer different types of accounts such as checking accounts, savings accounts, and certificates of deposit (CDs) where customers can deposit their money and earn interest.

- 2. Loans: They provide loans to businesses and individuals, such as home mortgages, auto loans, and personal loans. The loans are typically paid back with interest over a specific period of time.
- 3. Credit Cards: They issue credit cards to customers, allowing them to make purchases and borrow money with the promise of paying it back with interest.
- 4. Money transfers: They facilitate the transfer of money between accounts, including wire transfers, electronic transfers, and cashier's checks.
- 5. Other services: They also offer other services, such as wealth management, investment services, and insurance products.

Commercial banks are heavily regulated by government agencies, such as the Federal Reserve in the United States, to ensure that they operate safely and soundly. They play a vital role in the economy by providing access to credit and helping to facilitate economic activity.

#### ▼ Functions of commercial banks

Commercial banks perform several functions that are essential to the economy. Some of the main functions of commercial banks are:

- Accepting deposits: Commercial banks accept deposits from their customers, which can include individuals, businesses, and government entities. They offer various types of deposit accounts, such as checking accounts, savings accounts, and certificates of deposit.
- 2. Making loans: Commercial banks lend money to borrowers, such as individuals and businesses, for various purposes such as buying a home, starting a business, or financing a project. The loans are typically repaid with interest over a set period of time.
- 3. Issuing credit: Commercial banks issue credit cards to individuals and businesses, which can be used to make purchases and access short-term credit.
- 4. Facilitating payments: Commercial banks facilitate payments between individuals and businesses, such as wire transfers, electronic transfers, and checks.
- 5. Providing investment services: Commercial banks offer investment services, such as brokerage services, wealth management, and retirement planning.
- 6. Offering foreign exchange services: Commercial banks also provide foreign exchange services, which allow customers to exchange one currency for another.
- 7. Providing safety deposit boxes: Commercial banks offer safety deposit boxes for customers to store valuable items, such as important documents, jewelry, and other assets.

Overall, commercial banks play a critical role in the economy by providing access to credit, facilitating payments, and helping individuals and businesses manage their finances. They also contribute to economic growth by providing funding for new businesses and investment opportunities.

# ▼ *Process of money/credit creation by commercial banks*

Commercial banks have the ability to create money and credit through the process of fractional reserve banking. Here is the basic process:

1. Accepting deposits: Commercial banks accept deposits from their customers, which are typically held in various types of deposit accounts, such as savings accounts and checking accounts.

- 2. Holding reserves: Banks are required to hold a portion of their deposits as reserves with the central bank, such as the Federal Reserve in the United States. This reserve requirement is typically a small percentage of total deposits, such as 10%.
- 3. Lending: Banks can lend out the remaining portion of their deposits, which is called the excess reserves. This excess reserves can be lent out to borrowers, such as individuals and businesses, in the form of loans.
- 4. Creating money: When a bank makes a loan, the borrower receives the loan amount as new money, which is credited to their bank account. This new money is created out of thin air and is backed by the borrower's promise to repay the loan with interest.
- 5. Deposit creation: When the borrower spends the newly created money, it is deposited into another bank, which in turn holds a portion of the deposit as reserves and lends out the rest. This process can continue, with each new loan creating more deposits and more money in the system.
- Central bank control: The central bank, such as the Federal Reserve in the United States, can influence the amount of money and credit in the system by adjusting the reserve requirements, interest rates, and other policy tools.

Overall, the process of money and credit creation by commercial banks is an important part of the economy, as it allows for the expansion of credit and the creation of new money, which can help to drive economic growth and development. However, it is also important for banks to manage their risks and maintain adequate reserves to ensure the stability of the financial system.

# ▼ Commercial vs central bank

Commercial banks and central banks are two different types of financial institutions that play distinct roles in the economy.

Commercial banks are privately owned financial institutions that provide banking services to individuals, businesses, and governments. They accept deposits from customers and use those deposits to make loans and investments. Commercial banks are profit-driven, meaning they aim to make a profit by earning interest on loans and charging fees for their services.

Central banks, on the other hand, are government-owned institutions responsible for managing a country's monetary policy and regulating the banking system. The central bank acts as the "banker's bank" and provides services to commercial banks, such as acting as a lender of last resort and setting monetary policy through the control of interest rates and the money supply.

Some key differences between commercial banks and central banks are:

- 1. Ownership: Commercial banks are privately owned, whereas central banks are government-owned.
- 2. Services: Commercial banks provide banking services to customers, while central banks provide services to commercial banks.
- 3. Monetary policy: Central banks are responsible for setting monetary policy, while commercial banks do not have a role in setting monetary policy.
- 4. Control of money supply: Central banks have the power to control the money supply by adjusting interest rates and reserve requirements, while commercial banks have limited control over the money supply.
- 5. Profit motive: Commercial banks are profit-driven, whereas central banks are focused on promoting economic stability and controlling inflation.

Overall, commercial banks and central banks both play important roles in the economy, but their functions and responsibilities are distinct. Commercial banks are focused on providing banking services and earning a profit, while central banks are focused on managing monetary policy and promoting economic stability.

### **▼** Functions of central bank/RBI

The Reserve Bank of India (RBI) is the central bank of India, and it performs a wide range of functions to promote monetary stability, economic development, and financial inclusion. Some of the key functions of the RBI are:

- 1. Monetary policy: The RBI formulates and implements monetary policy to achieve price stability and promote economic growth. It uses a range of tools such as interest rates, reserve requirements, and open market operations to manage the money supply and control inflation.
- 2. Banking regulation: The RBI regulates and supervises banks and other financial institutions to ensure their safety and soundness. It issues licenses, sets prudential norms, conducts inspections, and takes corrective measures when necessary.
- 3. Issuance of currency: The RBI has the sole authority to issue currency notes in India. It manages the supply of currency in circulation, replaces old notes with new ones, and provides coins to meet the demand for small denominations.
- 4. Management of foreign exchange: The RBI manages India's foreign exchange reserves and regulates foreign exchange transactions to maintain stability in the foreign exchange market.
- Development of financial markets: The RBI promotes the development of financial markets, including money, bond, and forex markets. It provides liquidity and acts as a market maker to ensure the smooth functioning of these markets.
- 6. Payment and settlement systems: The RBI operates and regulates payment and settlement systems, including the National Electronic Funds Transfer (NEFT), Real-Time Gross Settlement (RTGS), and Bharat Bill Payment System (BBPS).
- 7. Financial inclusion: The RBI promotes financial inclusion by implementing policies and programs to extend banking services to underserved and unbanked areas and populations.

Overall, the RBI plays a critical role in maintaining financial stability and promoting economic growth in India. Its functions are diverse and far-reaching, and it works closely with the government and other stakeholders to achieve its objectives.