# **MONEY AND BANKING**

# **Introduction**

<u>Money</u>: Money is the most often used means of exchange. It is an economic unit that serves as a universally accepted means of exchange in a transactional economy. Money offers the benefit of lowering transaction costs, particularly the double coincidence of wants. There can be no exchange of commodities and thus no role for money in an economy consisting of only one person.

**Barter Exchange:** It is a trade in which one product or service is exchanged for another. It is the oldest form of commerce. Individuals and businesses exchange goods and services based on equivalent prices and good estimates. Individuals and businesses barter goods and services with one another based on similar pricing and quality assessments. Bartering, on a larger scale, can result in the most efficient use of resources by exchanging items in quantities that have equivalent values. Bartering can also assist economies in reaching equilibrium, which happens when supply and demand are equal.

#### **Functions of Money**

The functions of money are broadly classified as



#### **Disadvantages of Barter Exchange:**

- 1. A lack of a standardized means of measuring value.
- 2. There is a lack of desire for duplication.
- 3. A scarcity of common value measures.
- 4. Inadequate store of value.
- 5. Deferred payment standards are lacking.

# 6. Inability to divide.

**Demand of Money**: It is referred to as an individual's liquidity preference, which is the decision of holding money in liquid form, i.e., cash, in order to earn interest or as a precaution. Money demand is impacted by a number of factors such as inflation, income,

interest rates, and future uncertainty. The two important motives for the demand of money: transaction, and speculative motives, are commonly used to describe how these elements affect money demand.

- 1) <u>Transaction Motive</u>: The drive to hold cash amounts is referred to as the transaction's motive. The fact that most transactions involve an exchange of money is the transaction motive for demanding money. Money will be demanded because it is necessary to have money available for transactions. The aggregate quantity of transactions in an economy tends to increase as income grows. As a result, as income or GDP rises, so does the demand for money in transactions.
- 2) <u>Speculative Motive</u>: It refers to funds retained by investors in order to capitalise on potential investment opportunities in the economy. When retaining money is thought to be less hazardous than lending it or investing it in another asset, the speculative motive for demanding money emerges.

**Aggregate Money Demand:** In an economy, the entire demand for money is made up of transaction demand and speculative demand. The former is proportionate to real GDP and the price level, whereas the latter is inversely related to the market interest rate.

Md=MdT+MdsMd=MTd+Msd Where, Md= Money Demand Md= Money Demand MdT= Transaction Demand MTd= Transaction Demand MdS= Speculative Money Demand MSd= Speculative Money Demand

**<u>Fiat money:</u>** It is the currency that a government declares to be legal tender but is not backed by a physical asset. The value of fiat money is calculated by the link between supply and demand rather than the worth of the commodity used to make the money.

**Supply of Money:** It refers to the total money held by the public at a particular point in time in an economy. The supply of money does not include the cash balances held by the national and state governments, as well as the stock of money held by the country's banking system, because these are not in active circulation in the country.

<u>Measures of Money Supply</u>:

i. **M1M1:** It is the first and basic measure of the money supply. It includes currency held by the public, demand deposits of commercial banks, and other deposits with the Reserve Bank of India (RBI).

M1= Currency and coins with public( C) + Demand deposits of the public with the banks(DD) + Other deposits (OD) M1= Currency and coins with public( C) + Demand deposits of the public with the banks(DD) + Other deposits (OD)

ii. M2M2: It is also known as narrow money along with M1. It includes Savings deposits with Post Office saving banks.

M2=M1+ Savings deposits with Post Office saving banks M2=M1+ Savings deposits with Post Office saving banks

iii. <u>M3M3:</u> It also includes time deposits with a commercial bank and is known as broad money.

M3=M1+ Net time deposits with commercial banks M3=M1+ Net time deposits with commercial banks

iv. M4M4: It includes the total deposits excluding National Saving Certificates and is also known as broad money along with M<sub>3</sub>.
M4=M2 + Total post office deposite evoluting National Saving Certificates (NSC)

M4=M3+ Total post office deposits excluding National Saving Certificates (NSC)

### Money Creation by Banking System The currency deposit ratio

• The currency deposit ratio (cdr) is the ratio of money held by the public in currency to that they hold in bank deposits, cdr = CU/DD. It reflects people's preference for liquidity, cdr increases during the festive season as people convert deposits to cash balance for meeting extra expenditure during such periods.

# The reserve deposit ratio

- Banks hold a part of the money people keep in their bank deposits as reserve money and loan out the rest to various investment projects.
- Reserve money consists of two things vault cash in banks and deposits of commercial banks with RBI. Banks use this reserve to meet the demand for cash by account holders.
- Reserve deposit ratio (rdr) is the proportion of the total deposits commercial banks keep as reserves.
- Keeping reserves is costly for banks, as, otherwise, they could lend this balance to interest earning investment projects. However, RBI requires commercial banks to keep reserves in order to ensure that banks have a safe cushion of assets to draw on when account holders want to be paid.
- RBI uses various policy instruments to bring forth a healthy rdr in commercial banks. The first instrument is the Cash Reserve Ratio which specifies the fraction of their deposits that banks must keep with RBI.
- There is another tool called Statutory Liquidity Ratio which requires the banks to maintain a given fraction of their total demand and time deposits in the form of specified liquid assets.
- Apart from these ratios RBI uses a certain interest rate called the Bank Rate to control the value of rdr. Commercial banks can borrow money from RBI at the bank rate when they run short of reserves.
- A high bank rate makes such borrowing from RBI costly and, in effect, encourages the commercial banks to maintain a healthy rdr.

# **<u>Commercial banks</u>**

- Commercial banks accept deposits from the public and lend out this money to interest earning investment projects. The rate of interest offered by the bank to deposit holders is called the 'borrowing rate' and the rate at which banks lend out their reserves to investors is called the 'lending rate'.
- The difference between the two rates, called 'spread9, is the profit that is appropriated by the banks.
- Deposits are broadly of two types demand deposits, payable by the banks on demand from the account holder, e.g. current and savings account deposits, and time deposits, which have a fixed period to maturity, e.g. fixed deposits.

- Lending by commercial banks consists mainly of cash credit, demand and short-term loans to private investors and banks' investments in government securities and other approved bonds.
- The creditworthiness of a person is judged by his current assets or the collateral (a security pledged for the repayment of a loan) he can offer.

# **Instruments of Monetary Policy and the Reserve Bank of India**

- It is clear from the above discussion that the total amount of money stock in the economy is much greater than the volume of high powered money.
- Commercial banks create this extra amount of money by giving out a part of thendeposits as loans or investment credits.
- Total amount of deposits held by all commercial banks in the country is much larger than the total size of their reserves.
- If all the account-holders of all commercial banks in the country want their deposits back at the same time, the banks will not have enough means to satisfy the need of every accountholder and there will be bank failures.
- All this is common knowledge to every informed individual in the economy. Why do they still keep their money in bank deposits when they are aware of the possibility of default by their banks in case of a bank run (a situation where everybody wants to take money out of one's bank account before the bank runs out of reserves)?
- The Reserve Bank of India plays a crucial role here. In case of a crisis like the above it stands by the commercial banks as a guarantor and extends loans to ensure the solvency of the latter. This system of guarantee assures individual account-holders that their banks will be able to pay their money back in case of a crisis and there is no need to panic thus avoiding bank runs. This role of the monetary authority is known as the lender of last resort.
- Apart from acting as a banker to the commercial banks, RBI also acts as a banker to the Government of India, and also, to the state governments.
- It is commonly held that the government, sometimes, 'prints money' in case of a budget deficit, i.e., when it cannot meet its expenses (e.g. salaries to the government employees, purchase of defense equipment from a manufacturer of such goods etc.) from the tax revenue it has earned.
- The government, however, has no legal authority to issue currency in this fashion. So it borrows money by selling treasury bills or government securities to RBI, which issues currency to the government in return.
- The government then pays for its expenses with this money. The money thus ultimately comes into the hands of the general public (in the form of salary or sales proceeds of defense items etc.) and becomes a part of the money supply.
- Financing of budget deficits by the governments in this fashion is called Deficit Financing through Central Bank Borrowing.
- However, the most important role of RBI is as the controller of money supply and credit creation in the economy. RBI is the independent authority for conducting monetary policy in the best interests of the economy it increases or decreases the supply of high powered money in the economy and creates incentives or disincentives for the commercial banks to give loans or credits to investors.
- The instruments which RBI uses for conducting monetary policy are as follows:

#### **Open market operations**

- RBI purchases (or sells) government securities to the general public in a bid to increase (or decrease) the stock of high powered money in the economy.
- If RBI wishes to reduce the supply of high powered money it undertakes an open market sale of government securities of its own holding in just the reverse fashion, thereby reducing the monetary base.

# **Bank rate policy**

- As mentioned earlier, RBI can affect the reserve deposit ratio of commercial banks by adjusting the value of the bank rate which is the rate of interest commercial banks have to pay RBI if they borrow money from it in case of shortage of reserves.
- A low (or high) bank rate encourages banks to keep smaller (or greater) proportion of their deposits as reserves, since borrowing from RBI is now less (or more) costly than before.
- As a result banks use a greater (or smaller) proportion of their resources for giving out loans to borrowers or investors, thereby enhancing (or depressing) the multiplier process via assisting (or resisting) secondary money creation.
- In short, a low (or high) bank rate reduces (or increases) rdr and hence increases (or decreases) the value of the money multiplier, which is (1 + cdr)/(cdr + rdr).
- Varying reserve requirements
- Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR) also work through the rdr-route. A high (or low) value of CRR or SLR helps increase (or decrease) the value of reserve deposit ratio, thus diminishing (or increasing) the value of the money multiplier and money supply in the economy in a similar fashion.

# **Sterilisation by RBI**

- RBI often uses its instruments of money creation for stabilizing the stock of money in the economy from external shocks.
- Suppose due to future growth prospects in India investors from across the world increase their investments in Indian bonds which under such circumstances, are likely to yield a high rate of return. They will buy these bonds with foreign currency
- Since one cannot purchase goods in the domestic market width foreign currency, a person or a financial institution who sells these bonds to foreign investors will exchange its foreign currency holding into rupee at a commercial bank.
- The bank, in turn, will submit this foreign currency to RBI and its deposits with RBI will be credited with equivalent sum of money.
- What kind of adjustments take place from this entire transaction? The commercial bank's total reserves and deposits remain unchanged (it has purchased the foreign currency from the seller using its vault cash, which, therefore, goes down; but the bank's deposit with RBI goes up by an equivalent amount leaving its total reserves unchanged).
- There will, however, be increments in the assets and liabilities on the RBI balance RBPs foreign exchange holding goes up. On the other hand, the deposits of commercial banks width RBI also increase by an equal amount.

- But that means an increase in the stock of high powered money which, by definition, is equal to the total liability of RBI. With money multiplier in operation, this, in turn, will result in increased money supply in the economy.
- This increased money supply may not altogether be good for the economy's health. If the volume of goods and services produced in the economy remains unchanged, the extra money will lead to increase in prices of all commodities.
- People have more money in their hands with which they compete each other in the commodities market for buying the same old stock of goods.
- As too much money is now chasing the same old quantities of output, the process ends up in bidding up prices of every commodity an increase in the general price level, which is also known as inflation.
- RBI often intervenes with its instruments to prevent such an outcome. In the above example, RBI will undertake an open market sale of government securities of an amount equal to the amount of foreign exchange inflow in the economy, thereby keeping the stock of high powered money and total money supply unchanged.
- Thus it sterilises the economy against adverse external shocks. This operation of RBI is known as sterilisation.
- Money supply is, therefore, an important macroeconomic variable. Its overall influence on the values of the equilibrium rate of interest, price level and output of an economy is of great significance.

# Measures of money supply

Money supply, like money demand, is a stock variable. The total stock of money in circulation among the public at a particular point of time is called money supply. RBI publishes figures for four alternative measures of money supply, viz. and They are defined as follows

- Savings deposits with Post Office savings banks
- Net time deposits of commercial banks
- Total deposits with Post Office savings organizations (excluding National Savings Certificates)
- Where, CU is currency (notes plus coins) held by the public and DD is net demand deposits held by commercial banks. The word 'net' implies that only deposits of the public held by the banks are to be included in money supply.
- The interbank deposits, which a commercial bank holds in other commercial banks, are not to be regarded as part of money supply and are known as narrow money. And are known as broad money.
- These gradations are in decreasing order of liquidity.
- Is most liquid and easiest for transactions whereas is least liquid of all. Is the most commonly used measure of money supply? It is also known as aggregate monetary resources.