Macro Economics
Money and Banking

Money: Money can be defined as anything that is generally accepted as a trading method and at the same time acts as a measure, store value and rebate rate.

Functions of money:

1. Primary function

a. Medium of Exchange
b. A standard unit of value or a unit of value

2. Secondary functions

a. Postponed payment rate
b. Price store
c. Value transfer

3. Contingent Functions

a. Credit basis
b. Liquidity
c. The basis of the pricing method
d. Great benefit to producers
e. High satisfaction for customers
f. Basis for revenue distribution

Barter Exchange: A trade in which one product or service is exchanged for another. It is a very old form of commerce. Individuals and businesses exchange goods and services on the basis of fair prices and reasonable prices. Individuals and businesses trade in goods and services for each other based on the same values and quality assurance. Exchanges, on a large scale, can lead to better utilization of resources by exchanging items at equal prices. Trade can also help economies achieve equity, which occurs when supply and demand are equal.

Disadvantages of Barter Exchange Trading:

1. Lack of standardized measurement methods.
2. There is a lack of desire to repeat.
3. Lack of standard value estimates.
4. Insufficient price store.
5. Postponed payment rates do not exist.
6. Inability to differentiate.

Demand of money: It is referred to as an individual's financial preference, which is the decision to hold cash in cash, that is, cash, for interest or as a precautionary measure. The demand for money is affected by many factors such as inflation, income, interest rates, and uncertainty about the future. Two important motives for money demand: performance and speculative motives are often used to explain how these factors affect demand.

i. Transaction motive: The drive to capture value for money is called motivation. The fact that most transactions involve currency exchange is the purpose of making money. Money will be demanded because it is necessary to have a transaction fee. The combined value of jobs in the economy tends to increase as incomes grow. As a result, as revenue or GDP increases, so does the need for revenue in sales.
ii. Speculative motive: Refers to funds held by investors to take advantage of potential investment opportunities in the economy. When savings are thought to be less risky than borrowing or investing in other assets, a more compelling reason for demanding money arises.

Aggregate Money Demand: In the economy, every need for money is created by the need for transactions and the need for speculation. The first is equal to real GDP and inflation, and the latter is related to the interest rate of the market.
Md = MdT + MdsMd = MTd + Msd
There,
Md = the Need for Money Md = The Need for Money
MdT = Transaction Demand MTd = Need for Action
MdS = Estimated Need MSd = Estimated Need

Fiat Money: It is a type of money that the government declares as a legal tender but is not supported by tangible assets. The value of fiat money is calculated by the link between supply and demand rather than the value of the asset used to make money.

Money Supply: The total amount of cash (notes, coins and bank deposit requirement) distributed is held by the public over a period of time.
Provision of funds does not include the remaining funds held by the central government and the federal government. And the amount of money held by the country's banks as it is not in the real world distribution.
Fundraising Steps = Public Funds + Deposit Needs Deposit held by commercial banks
M1 = C + DD + OD
C = Currency and coins and society
DD = Create public deposits in banks
OD = other deposits

M2 = M1 + Post deposit savings
M3 = M1 + Deposit time for commercial banks

M4 = M3 + Deposit amount for postal savings organization without NSC deposits

Legal Definitions: Narrow and Broad Money- Money, as the need for money, is a stock change. The amount of money that is distributed among the community over a period of time is called money supply. The RBI publishes statistics for four other funding mechanisms, viz. M1, M2, M3 and M4. They are described as follows

M1 = CU + DD
M2 = M1 + Savings Deposit at Post Office savings banks
M3 = M1 + Time residual deposit of commercial banks
M4 = M3 + Deposit amount for Post Office Savings Organizations (excluding National Nursing Certificates)

There, the CU is a type of currency (notes and coins) owned by the public and the DD is a residual deposit held by commercial banks. The term ‘net’ means that only public deposits held by banks should be included in the supply chain. Investments made between banks, a commercial bank owned by other commercial banks, should not be considered part of the money.

The M1 and M2 are known as narrow money. The M3 and M4 are known as broad money. These steps are in the downward order of liquidity. The M1 is very liquid and very easy to do things and the M4 is the smallest liquid. The M3 is the most widely used funding rating. It is also known as integrated financial resources.

Banking Systems:
1. Commercial Bank: A commercial bank is a type of financial institution that manages all activities involving depositing and withdrawing public funds, as well as the provision of loans for investment purposes and other similar activities. These for-profit commercial banks run businesses for the sole purpose of making a profit. The State Bank of India, Canara Bank is some examples.

Functions of Commercial Banking
1. Primary function: -
(a) Receipt of deposits
(b) Debt development
(c) Trade discount building.
2. Secondary function: -
1. Agency work
(a) Transfers of funds

(b) Revenue collection
(c) The buying and selling of shares and securities on behalf of clients
(d) Profit and interest collection
(e) Debt settlement and insurance premium on behalf of clients
(f) To act as executor and trustee
(g) To seize the consultant and customer representative and deliver the letter of credit to the customer.

2. General utility function

(a) Buy and sell foreign currency.
(b) Issuance of traveller’s check.
(c) Safe storage of essential goods in locks.
(d) Bonding of securities

2. Central Bank: In the banking system, the central bank is known as the top financial institution. It is seen as an important part of the country's economic and financial system. The central bank is an independent authority responsible for overseeing, regulating and stabilizing the national financial and banking framework.

Functions of Central Banks

1. Bank of issues
2. Bank to Government
3. Banker’s Bank and Supervisor.
4. Credit Regulator.
5. Lender with a mortgage
6. Caretaker of foreign exchange transactions

MONEY CREATION OR CREDIT CREATION BY COMMERCIAL BANKS

CREDIT is defined as the amount of money that one organization makes to another at a certain exchange rate.

Banks' ability to generate cash or debt depends on (i) the amount of the basic deposit and (ii) the official deposit rate (LRR).

Legal Reserve Ratio (LRR): - is determined by the country's largest bank and is the minimum deposit required by the banks.

Cash Reserve Ratio (CRR): - It is part of the LRR that should be kept in the central bank.

Statutory Liquidity Ratio (SLR): - It is part of the LRR that must be maintained by the bank itself.

The deposits required by the commercial bank are part of the cash. Commercial banks lend money to borrowers by opening a deposit account required in their name. Borrowers are free to use this money by writing checks. By definition demand deposits are part of the cash. Therefore, by creating an additional demand for the bank you create money. Creating cash depends on two factors: the main deposit and the Legal Reserve Ratio (LRR). Deposit Repetition = 1 / LRR Total Deposit Creation = Initial Deposit X 1 / LRR.

Repo rate: Repo rate is the rate at which the country's largest bank (Reserve Bank of India in the case of India) borrows money from commercial banks in the event of a financial crisis. The repo rate is used by financial authorities to control inflation.
Description: In the event of inflation, major banks increase the rate of repo as this makes banks less inclined to lend to the central bank. This ultimately reduces the availability of money in the economy and thus helps to control inflation.

Reverse repo rate: Reverse repo rate is the rate at which the country's largest bank (Reserve Bank of India if possible in India) borrows money from domestic banks. It is a monetary policy tool that can be used to control the country's cash flow.
Description: An increase in reverse repo rate will reduce the supply of funds and vice versa, some things will remain the same. An increase in the repo rate means that commercial banks will receive more incentives to park their funds with the RBI, thus better off the supply of money in the market.

Policy tools to control money supply- The Reserve Bank are the only institution that can disburse funds. When commercial banks need more money to create more debt, they may go to the market with those funds or go to the Central Bank. The Central Bank provides them with various tools. This role of the RBI that you are ready to lend to banks at all times is another important function of the central bank and because of this central bank is said to be the last lender. The RBI regulates the provision of money to the economy in various ways. The tools used by the Central Bank to control the disbursement of funds can be Quantitative or Qualitative. Quantitative tools which control the rate of transaction by changing CRR or the level of banking or open market operations. Qualitative tools include persuading the Central Bank to discourage commercial banks or to encourage borrowing by soliciting behaviour, demand for money, etc.

I. Qualitative Measures
1. Cash Reserve Ratio (CRR): The portion of the deposit amount that the State Bank of India requires to be kept as well as that of liquid currency. When calculating the base rate, one of the reference levels is the savings rate. The default rate is a minimum borrowing rate where the bank is not allowed to borrow money. The Reserve Bank of India sets the standard rate. The rate is

fixed, ensuring the openness of the credit market when it comes to borrowing and lending.

2. Statutory Liquidity Ratio (SLR): It is a requirement that banks must keep before transferring credit to customers. With the exception of the Cash Reserve Ratio (CRR), banks are required to keep a certain percentage of their residual expenses and time loans on liquid assets such as cash, gold, and securities. Among other things, the legal payment rate applies to current securities issued under market lending programs, treasury loans, and market stability programs (MSS). Banks should report their SLR maintenance to the RBI every Friday, and penalties should be paid if SLR is not maintained as required.

3. Bank Rate: The bank rate is the interest rate charged by the country's largest bank to its local banks for a loan. The interest rate charged by the central banks is designed to stabilize the economy. Commercial bank lending rates are affected by bank rates. Higher banking rates will lead to higher bank lending rates. The central bank may raise the profile of the bank to reduce its revenue, and vice versa.

4. Higher Powered Money: The money created by the RBI and the government, where the public controls the currency and the banks manage the reserves. It differs from the amount that covers the required deposits, and the savings serve as a basis for creating the required deposits.
The most powerful money is the total amount of money in a commercial bank, which reflects notes and coins held by the public. Increased bank deposits and cash flow constraints are both based on strong capital.

II. Quantitative Measures
1. Open Market Operations: Refers to the sale and purchase of securities by the central bank to or from commercial banks or the general public. Open market performance is one of the volume measures used by the State Bank of India to correct year-round debt conditions and reduce the impact of interest rates and inflation rates. Changes in the Cash Reserve Ratio (CRR), banking rate, or open market performance are all examples of quantitative measures used to limit the size of a cash offer.

2. Bank Rate Policy: The term "banking rate policy" refers to the conversion of a large bank to a discount rate to affect the economic situation of debt. The banking rate policy is based on the assumption that changes in banking rates are often followed by comparable changes in the market value of money, making debt more expensive or less expensive and affecting demand and supply.

3. Sterilisation by RBI: Sterilisation is a market-based RBI method of making part or all of the income imports. Interest-bearing is a market-based RBI method of making part or all of the income imports. The interest-free method is used to convert one currency into local currency compared to another and is introduced in the foreign exchange market. Fertilization in the traditional sense involves buying and selling large banks in open markets.

Q.1 Which of the following is not an assumption of credit creation processes-?
(i) Entire banking system is taken as a single unite.
(ii) All transaction is done through banks.
(iii) There is no saving in the economy.
(a) Only (i)
(b) Only (ii)
(c) Only (iii)
(d) Both (i) and (ii)

Q.2 Given CRR = 4% and SLR = 16%, the value of money multiplier is:-
(a) 25
(b) 6.25
(c) 5
(d) 8.33

Q.3 High powered Money consists of:-
(a) Currency and coins held by the public
(b) Currency, cash reserves with banks, and demand deposits
(c) Currency held by the public and cash reserves with banks
(d) Currency and demand deposits

Q.4 Money multiplier is equal to
(a) 1/CRR
(b) 1/SLR
(c) 1/LRR
(d)None of the above

Q.5 If total amount of money created in the system is 10,000 with LRR being 40% then amount of initial deposit?
(a) 1500
(b) 2000
(c) 2500
(d) 4000

Q.6 Name the credit-control method which refers to the difference between the amount of loan and market value of the security offered by the borrower against the loan.
(a) Selective Credit Controls
(b) Moral Suasion
(c) Margin Requirements
(d) Legal Reserve Requirements

Q.7 What will be the effect of an increase in the 'Repo Rate on the Money Supply?
(a) Money supply will increase
(b) Money supply will decrease
(c) Money supply will remain the same
(d) Money supply will initially increase and then it will decrease

Q.8 In order to reduce credit in the country, RBI may:-
(a) Buy securities in the open market
(b) Sell securities in the open market
(c) Reduce cash reserve ratio
(d) Reduce Repo Rate

Q.9 Match the correct pair from given below.

COLUMN I	COLUMN II
Limited legal tender	RBI
Unlimited legal tender	Coins
Banker to the public	Currency notes

Banker to the government	Commercial bankers

A B C D
(a) (i), (ii), (iii), (iv)
(b) (ii), (i), (iv), (iii)
(c) (ii), (iii), (iv), (i)
(d) (ii), (iv), (i), (iii)

Q.10 Who is responsible for the supply of coins in India?
(a) Reserve bank Of India
(b) Ministry of finance
(c) Ministry of commerce and industry
(d) Banker's association of India

Q.11 What is the value of money multiplier when initial deposits are ₹500crores and LRR is 10%?
(a) 0.1
(b) 0.2
(c) 10
(d) 20

Q.12 What happens where there is an increase in the margin requirements?
(a) It reduces the borrowing capacity and money supply
(b) Encourages people to borrow more and money supply rise
(c) No change in money supply
(d) None of these

Q.13 Reverse Repo Rate is the rate at which Central Bank:-
(a) Lends Money to Commercial Banks for short term
(b) Lends Money to Commercial Banks for long term
(c) Accepts deposits from the commercial Banks
(d) None of these

Q.14 Demand Deposits include:-
(a) Saving Account deposits and fixed deposits
(b) Saving Account deposits and current account deposits
(c) Current account deposits and fixed deposits
(d) All types of deposits

Q.15 Which of the following is not a quantitative Method of Credit Control?
(a) Open Market Operation
(b) Margin Requirements
(c) Variable Reserve Ratio
(d) Bank Rate Policy

Q.16 Dear Money policy means
(a) Giving loan and advances to trade and industry at higher interest rate
(b) Paying less for some quantity of goods and services
(c) Printing high denomination currency
(d) Printing money by costly technology

Q.17 Supply of money refers to the quantity of money:-
(a) During the year only
(b) During any period of time
(c) As on 31st March only
(d) As on any point of time

Q.18 What items are not included in M4 measure of supply?
(a) Currency and coins with the public
(b) Inter- bank deposits

(c) other deposits with RBI
(d) None of the above

Q.19 Money supply includes:
(a) All deposits in banks
(b) Demand deposits with the banks
(c) only time deposits in banks
(d) None of them

Q.20 Which are also called broad money?
(a) M1
(b) M2
(c) M3
(d) M4

Q.21 The ratio of total deposits that a commercial bank has to keep with the Reserve Bank of India is called:
(a) Statutory Liquid Ratio
(d) Deposit Ratio
(c) Cash Reserve Ratio
(d) Legal Reserve Ratio

Q.22 If an economy is to control recession like most of the Euro-Zone nations, which of the following can be appropriate:
(a) Reducing Repo Rate
(b) Reducing CRR
(c) Both a) and b)
(d) None of a) and b)

Q.23 Who is the custodian of the Indian Banking System?
(a) Reserve Bank of India
(b) State Bank of India
(c) Unit Trust of India
(d) LIC of India

Q.24 Banks use the major portion of the deposits to:
(a) Keep as a reserve so that people may withdraw
(b) meet their routine expenses
(c) extend loans
(d) meet renovation of bank

Q.25 Which of the following deposits are also known as chequable deposits?
(a) Saving Account Deposits
(b) Demand Deposits
(c) Saving Account deposits plus fixed account deposits
(d) Current Account Deposits

Q.26 RBI can increase the money supply in the market by:
(a) Selling government securities
(b) buying government securities
(c) borrowing money from commercial banks
(d) None of the above

Q.27 Which of the following is not the monetary tool?
(a) CRR
(b) SLR
(c) Deficit financing
(d) Open market operations

Q.28 Credit Multiplier is:

(a) 1/CRR
(b) 1*CRR/10
(c) Cash * CRR
(d) None of these

Q.29 Credit money is increased when CRR:
(a) Falls
(b) Rises
(c) Both a) and b)
(d) None of these

Q.30 BASEL NORMS are related to the:
(a) Insurance sector
(b) Telecommunication
(c) Real estate
(d) Banking sector

Q.31 What is the defect of the barter system?
(a) Lack of double coincidence of wants
(b) Difficulty in the measurement of value
(c) Difficulty in store of value
(d) All of these

Q.32 Every bank is required to maintain a fixed percentage of its assets in the form of gold and government securities are called:
(a) Cash Reserve Ratio
(b) Statutory Liquidity Ratio
(c) Both a) and b)
(d) None of the above

Q.33 Open Market Operations means:
(a) Sale of agricultural products in the government regulated Mandis.
(b) Sale and purchase of bonds and securities to the commercial banks by the RBI.
(c) Sale and purchase of bonds and securities by the RBI to the government.
(d) Sale and purchase of bonds and securities by the commercial banks to the customers.

Q.34 If an economy is to control recession like most of the Euro-Zone nations: which of the following can be appropriate-
(a) Reducing repo rate
(b) reducing CRR
(c) both a and b
(d) none

Q.35 The aim of demonetization was:
(a) To curb corruption
(b) to curb counterfeiting
(c) To curb the use of high denomination notes for terrorist activities
(d) All the above

Q.36 The Process of buying and selling of securities by the central bank of a country is known as _________
(a) Margin Requirement
(b) Open market Operations
(c) Cash Reserve Ratio
(d) Statutory Liquidity Ratio

Q.37 What are the alternative measures of money supply in India?
(a) M1
(b) M2
(c) M3 and M4
(d) All of these

Q.38 When was the minimum reserve system started in India?
(a) 1947
(b) 1948
(c) 1951
(d) 1957

Q.39 High Powered Money includes:
(a) C + DD + OD
(b) C + R + OD
(c) C + R + TD
(d) C + DD + TD

Q.40 Which is the correct order of money evolution?
(a) Commodity Money, Paper Money, Metal Money
(b) Commodity Money, Metal Money, Paper Money, Credit Money
(c) Credit Money, Metal Money, Paper Money
(d) None of the above

Solutions

1. (c)
2. (c) Money Multiplier equals to 1/LRR.
   LRR equal to SLR + CRR
   Hence Money Multiplier equals to 1/20%. After solving it comes to 5.
3. (c) High powered money is the total money issued by RBI. It is always in the hands of public in the form of currency and coins and bank deposits + cash reserves with banks
4. (c)
5. (d) Initial deposit=Total deposit × LRR
   Initial deposit=Rs.10, 000 × 0.4
   Initial deposit=Rs.4000crores
6. (c) Margin Requirements is the percentage of a security value that may be used as collateral for a loan to finance its purchase. In U.S. the margin requirement is 50 percent of the value of bonds or shares.
7. (b) Repo rate is the rate at which central bank lends money to commercial banks in the event of shortfall of funds, an increase in repo rate makes it costly for businesses and industry to borrow money. This in turn slows down the investment and reduces the supply of money.
8. (b) Selling securities in the open market reduces the deposits of commercial bank. It further reduces the lending capacity.
9. (c)
10. (b) In respect of coins, the role of RBI is limited to the distribution of coins that are supplied by the Government of India. The Government of India is responsible for the designing and minting of coins in various denominations as per the Coinage Act, 2011.
11. (a) MONEY MULTIPLIER= 1 / LRR
    MONEY MULTIPLIER= 1 / 10 = 0.1
12. (a) Margin requirement is the percentage of a security's value that may be used as a collateral loan to finance the purchase. An increase in margin requirements would stop the borrower to take loan as the value of its security would not lend him the amount he need and therefore it will happen for all general public and would lead to decrease in money supply.
13. (c) Reverse repo rate is the rate at which the central bank of a country borrows money from commercial banks within the country. It is a monetary policy instrument which can be used to control the money supply in the country.
14. (b) Demand deposits include saving account deposits and current account deposits. These are called demand deposits as it is very liquid and can be used for purchase of goods and services immediately.
15. (b) Margin requirement refers to the difference between the current value of the security offered for loan (called collateral) and the value of loan granted. For example- a person mortgages his house worth one crore rupees with the bank for a loan of 80 lakh rupees. The margin requirement in this case will be 20 lakh rupees. It is a qualitative method of credit control adopted by the central bank in order to stabiles the economy from inflation or deflation.
16. (a) Dear money policy refers to a monetary policy by the central bank where the central bank sets high interest rates so that credit is not easily available to the general public in order to decrease the real income and hence purchasing power of the people. Such a policy is used by the government at the time of inflation in the economy.
17. (d) The supply of money is always calculated as on point of time. It is the total stock of money of all types held by the public of a country at a given point of time. It includes both currencies held with the public and paper notes as well as demand deposits of people with the commercial banks.
18. (a) Money supply refers to the total stock of money of all types (currency as well as demand deposits) held by the people of a country at a given point of time.
    Money supply is measured in several ways which includes M1, M2, M3 and M4 measurement of money supply. Every measurement has its own definition with different components varying from

most liquid to most rigid form. M4 measurement of money supply is the most rigid among all which do not include currency and coins with public.

19. (a) Money supply refers to the total stock of money of all types (currency as well as demand deposits) held by the people of a country at a given point of time.
In India, money supply is measured in several ways which includes M1, M2, M3 and M4 measurement of money supply. Every measurement has its own definition with different components varying from most liquid to most rigid form. All these money supply measurement includes all types of deposits in banks including demand deposits, time deposits etc.

20. (c) M3 measurement of money supply is a broader concept of money supply compared to M1. Besides all the components of M1, it includes net time deposits (or fixed deposits or term deposits) of the people with the commercial banks. Therefore, M3 is also called broad money.

21. (c) The cash reserve ratio is one of the important tools of monetary policy by the RBI. It is the sum of net time and demand deposits that a commercial bank is required to maintain with the RBI.

22. (c) Repo rate relates to the loans offered by the RBI to the commercial banks not without collateral. Cash reserve ratio refers to the percentage of total demand deposits of the commercial banks which they must keep as cash reserves with the RBI.
In order to control recession, the central bank must reduce both repo rate and CRR so the credit creation capacity of the commercial banks and the money supply in an economy get increased. As a result aggregate demand will also increase.

23. (a)

24. (c) The major objective of the bank is to give loans to the borrowers; the bank earns huge profit, as the borrowers have to give interest. This helps to bank to grow and be stable in the economy. Deposits are not reserved for withdrawal, they keep a certain amount but most of the money is available to extend loans. Routine expenses can be easily met, as banks keep some amount for day-to-day expenses. Many commercial banks get funding from the government, banks are there to provide financial services to their customers.

25. (b)

26. (a)

27. (c) Deficit financing means generating funds to finance the deficit which results from an excess of expenditure over revenue. The gap is covered by borrowing from the public by the sale of bonds or by printing new money.

28. (a)

29. (a)

30. (d) Basel norms or Basel accords are the international banking regulations issued by the Basel Committee on Banking Supervision. The Basel norm is an effort to coordinate banking regulations across the globe, with the goal of strengthening the international banking system.

31. (d)

32. (b) Statutory Liquidity Ratio popularly called SLR is the minimum percentage of deposits that the commercial bank maintains through gold, cash and other securities. However, these deposits are maintained by the banks themselves and not with the RBI or Reserve Bank of India.
Current SLR in India – 18.00%

33. (b) Open market operations (OMO) refers to when the Federal Reserve buys and sells primarily U.S. Treasury securities on the open market in order to regulate the supply of money that is on reserve in U.S. banks, and therefore available to loan out to businesses and consumers.

34. (c) Repo rate relates to the loans offered by the RBI to the commercial banks not without collateral. Cash reserve ratio refers to the percentage of total demand deposits of the commercial banks which they must keep as cash reserves with the RBI.
In order to control recession, the central bank must reduce both repo rate and CRR so the credit creation capacity of the commercial banks and the money supply in an economy get increased. As a result aggregate demand will also increase.

35. (d)

36. (b) Open market operations refer to buying and selling of Government securities and treasury bills by the central bank with a view to regulate the supply of money in the economy.

37. (d) M1 = CU + DD.
M2 = M1 + Savings deposits with Post Office savings banks.
M3 = M1 + Net time deposits of commercial banks.
M4 = M3 + Total deposits with Post Office savings organizations (excluding National Savings Certificates)

38. (d)

39. (b) High Powered Money- High powered money or monetary base refers to the money produced by R.B.I. and Government of India. Alternatively total liability of monetary authority of the country and R.B.I. is called monetary base or high powered money (H). It consists of (i) currency (notes and coins) in the hands of public (C), (ii) Cash reserve of commercial banks (R) and (iii) Other deposits with R.B.I. (OD). Symbolically:
H = C + R + OD

40. (b)