3. MACROECONOMICS

❖ Barter system

- Barter system of exchange is a system in which goods are exchanged for goods.
- For example, wheat may be exchanged for cloth; house for horses, etc., or a teacher may be paid wheat or rice as a payment for his/her services.

Barter is possible only if goods produced by two persons are needed by each other. It is called double coincidence of wants.

➢ Double coincidence of wants

i. Double coincidence of wants means that goods in possession of two different persons must be useful and needed by each other. But it is rare.
ii. It is difficult to find such a person every time. In barter system, exchange becomes quite limited.

So money was invented to make exchanges easier.

❖ Money

Money is something which is generally acceptable as a medium of exchange and can be converted into other assets without losing its time and value.

➢ Functions of money

Medium of exchange - Individuals can exchange their goods and services for money and then can use this money to buy other goods and services according to their needs and convenience.

Measure of value /unit of account –

- Money works as a common denominator into which the values of all goods and services are expressed.
- When we express the values of a commodity in terms of money, it is called price and by knowing prices of the various commodities, it is easy to calculate exchange ratios between them.

Store of value - Wealth can be conveniently stored in the form of money.

Different motives of using money.

➢ The Transaction Motive of money.

- Money is needed to carry out transactions, to buy-sell good and services people need.
- The number of times a unit of money changes hands during the unit period is called the velocity of circulation of money

The Speculative Motive

- Use of money in investment and asset creation in hope/speculation that their value will increase in future.
- Expecting more money in future from assets.
  Ex. Buying property, bullion, bonds, money etc.

Precautionary motive - saving money for bad times.

❖ DEMAND SUPPLY OF MONEY

A. Demand of money

- Demand of money the larger is the quantum/number of transactions to be made, the larger is the quantity of money demanded.
- Since the quantum of transactions depends on income, so a rise in income will lead to rise in demand for money at higher interest rates, money demand comes down.

B. Supply of Money

- In a modern economy, money comprises cash and bank deposits.
- Money supply is created by a system comprising two types of institutions:
  - Central bank of the economy
  - Commercial banking system.

1. Central bank

- M0/Central Bank money/'high-powered money'/'reserve money' /'monetary base'
- This currency issued by the central bank can be held by the public or by the commercial banks. it acts as a basis for credit creation.

M0= currency in circulation + bank's deposits near RBI + other deposits near RBI.

Other deposit : it means deposits held by the RBI of all economic units except the government and banks. like-semi-government public financial institutions (like IDBI, IFCI, etc.), foreign central banks and governments, the International Monetary Fund, the World Bank, etc.

2. Commercial Banks

- **Main function -** Taking deposits and giving loans

Spread –

- The interest rate paid by the banks to depositors is lower than the rate charged from the borrowers.
- This difference between these two types of interest rates is called the 'spread', it is the profit appropriated by the bank.

Credit creation by commercial banks - through Money multiplier mechanism.

❖ MONEY MULTIPLIER

➢ **Definition-** Money multiplier effect is seen in commercial banks as they accept deposits, and after keeping a certain amount as a reserve, they distribute the remaining money as loans.

Explanation-

- The Money Multiplier refers to how an initial deposit can lead to a bigger final increase in the total money supply.
- For example, if the commercial banks gain deposits of 1 lakh rupees and this leads to a final money supply of 10 lakh rupees. The money multiplier is 10.

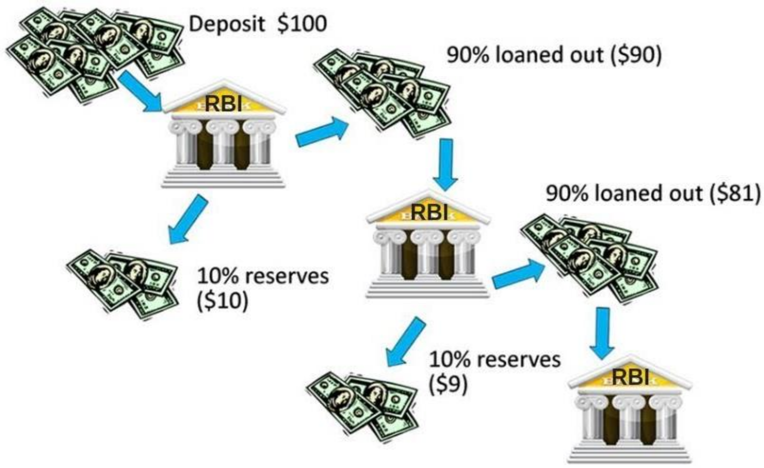
- This happens as after keeping a certain amount (suppose 10%) as a reserve, they distribute the remaining money as loans.

  if people have high banking habit, they will keep more deposits in banks.
  More deposits→ more lending by bank→ more multiplication of money.

- Money Multiplier is the ratio of Broad Money or money supply (M3) to Reserve Money/base money/high power money. (M0).
- Maximum amount of broad money that could be created by commercial banks for a given fixed amount of base money and reserve ratio.
- Clearly, its value is greater than 1. So broad money supply is more than base money.
- This is also called 'Credit money'- money created due to lending by commercial banks.

➢ Money Multiplier and Reserve Ratio.

- Reserve Requirement (R)- The amount which banks have to keep as reserve. Ex. CRR, SLR.
- Money multiplier M = 1/R
- It means that if the reserve ratio is higher, then the money multiplier will be lower
- The banks need to keep more reserves. As a result, they will not be able to lend more money to individuals and businesses. Less lending, so less multiplication of money.



Q. The money multiplier in an economy increases with which one of the following?

1. Increase in the cash reserve ratio
2. Increase in the banking habit of the population
3. Increase in the statutory liquidity ratio
4. Increase in the population of the country

➢ Measures of Money supply

Money supply = Currency in circulation plus deposits of people in banks
It provides money circulating in economy or Money available in economy.

1) M1 = CU + DD
   CU is currency held by the public
   DD is net demand deposits held by commercial banks.
   It is called Narrow money.

2) M2 = M1 + Post Office Savings deposits.

3) M3 = M1 + Net time deposits of commercial banks.
   It is known as broad money or aggregate monetary resources.

4) M4 = M3 + Total deposits with Post Office savings organizations.

To remember-
Liquidity. : M1> M2> M3> M4
M1 is most liquid.
M4 is least liquid.
Currency in circulation= notes and coins in circulation.
Currency in circulation = currency ever issued by RBI – currency withdrawn by it.
Currency with the public= total currency in circulation - cash with banks

❖ MONETARY POLICY COMMITTEE (MPC)

- Monetary policy refers to the credit control measures adopted by the central bank of a country. RBI is the sole monetary authority which decides the supply of money in the economy.
- MPC is a statutory body created under Monetary Policy Framework Agreement 2015
- MPC is entrusted with the responsibility of fixing the benchmark repo rate (policy rate) required to contain inflation as defined in the Monetary Policy Framework Agreement.
- The meetings of the MPC are held at least 4 times a year and it publishes its decisions after each such meeting.
- MPC is 6-member body including 3 members from RBI and 3 members to be nominated by the Central Government.
- Chairperson of MPC – RBI Governor
- Quorum for meeting – 4 members
- Decisions are taken by majority with the Governor having the casting vote in case of a tie.
- To ensure transparency – Govt can send messages only in writing.
- Committee must publish its proceedings of the meeting on the 14th day, and "Monetary policy report" at every 6 months.

RBI SIDE	GOVT. SIDE
3 members – RBI Governor, Dy. Governor, One nominated person -will be from RBI side. RBI Governor (Shri Shaktikanta Das), as the Ex-officio Chairman.	3 members will be selected from government side.
Their tenure tied with their ex-officio job tenure.	Tenure: 4 years, no reappointment.
RBI Governor & Dy. Governor are selected by Financial Sector Regulatory Appointment Search Committee (FSRASC), headed by Cabinet Secretary (IAS)	They're selected by Search-cum-Selection Committee headed by Cabinet Secretary (IAS)

➤ OBJECTIVE OF MPC

- Promoting economic development through ensuring optimum inflation level which will drive economic growth in long run.
- Controlled Expansion of Bank Credit with special attention to seasonal requirements (E.g. for agricultural purposes) for credit without affecting the output.

- Promotion of Investment and increase the productivity of investment
- Promotion of Exports and Food Procurement Operations by paying special attention in order to boost exports and facilitate trade.
- Desired Distribution of Credit – Monetary policy decides over the specified percentage of credit that is to be allocated to priority sector and small borrowers.
- Equitable Distribution of Credit to all sectors of the economy and all social and economic classes of people.
- To promote economic efficiency in the financial system and tries to incorporate structural changes such as deregulating interest rates, ease operational constraints in the credit delivery system, to introduce new money market instruments etc.
- Reducing the Rigidity and encouraging a more competitive environment and diversification.

➢ LIMITATIONS OF MONETARY POLICY

- Conflicting objectives – To achieve the objective of economic development, the monetary policy is to be expansionary but to achieve the objective of price stability and curb on inflation policy is to be contractionary.
- Underdeveloped Indian money market – The weak money market limits the coverage, as also the efficient working of the monetary policy.
- Poor monetary transmission- Indian Banks don't immediately pass on the RBI rate cuts to customers, citing NPA/Bad loans/profitability problems.
- Government Side Issues – Fiscal repression, Fiscal slippage, Fiscal deficit, Subsidy leakages, Populist Loan-waivers etc.
- Structural Issues in Economy – Lack of electricity-road infrastructure / Ease of Doing Biz production, long pending land and labour reforms.
- High percentage of unorganized economy and Presence of Informal moneylenders in rural areas.
- Poor penetration of the banking sector and financial inclusion etc.
- black money cannot be checked by monetary policies.

Q. Which of the following statements is/are correct regarding the Monetary Policy Committee (MPC)? [CSE-2017]

1. It decides the RBI's benchmark interest rates.
2. It is a 12-member body including the Governor of RBI and is reconstituted every year.
3. It functions under the chairmanship of the Union Finance Minister.

Select the correct answer using the code given below:

a) 1 only b) 1 and 2 only c) 3 only d) 2 and 3 only

❖ LIQUIDITY TRAP

- A liquidity trap means consumers' preference for liquid assets (cash) is greater than the rate at which the quantity of money is growing.
- People expect prices to fall and interest rates on Savings to rise in future.
- Here monetary policy becomes ineffective due to very low interest rates combined with consumers who prefer to save rather than invest in higher-yielding bonds or other investments.
- While a liquidity trap is a function of economic conditions, it is also psychological since consumers are making a choice to hoard cash instead of choosing higher-paying investments because of a negative economic outlook.

➢ REASONS FOR LIQUIDITY TRAP

- Expectations of deflation/fall in prices by the public
- Preference for saving – Liquidity traps occur during periods of recessions and a gloomy economic outlook.

- Credit Crunch – Banks lost significant sums of money in buying sub-prime debts, which defaulted. Therefore, they are seeking to improve their balance sheets by restricted lending activities.
- Ineffective monetary policy transmission (Banks don't pass Base Rate cuts onto consumers).
- Unwillingness to hold bonds – If interest rates are zero, investors will expect interest rates to rise sometime. They expect bonds to get cheaper.

❖ PAPER MONEY (FIAT MONEY)

- Fiat means authority, authoritative order.
- Paper money acts as money (Legal tender) because it is guaranteed by the national governments. Fiat money is legally recognized to settle all debts & payments within territorial jurisdiction.
- Fiat money gives central banks greater control over the economy because they can control how much money is printed.
- When fiat money is backed by gold or silver standard, it's called "representative money" or "commodity money"
- **Examples-** US dollar, Indian Rupee, Euro, etc.
- **In India, two entities issue fiat money –**
  1. Government of India under the coinage act 1909 issues all coins and Rs.1 note; while
  2. RBI Act 1934 empowers RBI to issue the remaining bank notes and RBI central board is empowered to make recommendations to the government of India to withdraw any notes from circulation. This is called "Demonetization" and was done thrice in India after independence.

WHAT IS NOT FIAT MONEY?

- DD, Cheques, Credit Card, ATM card
- Bitcoin & other Digital currency
- Money without government legal backing
- Superstores plastic coins, cards & coupons
- Shares, Bonds, Debentures, G-Sec, T-bill

PROBLEMS OF FIAT MONEY-

- Over printing of currency results in Reduction in value of money and inflation.
- Risk of theft and prone to counterfeit (duplicate/fake currency)

FIDUCIARY MONEY

- Fiduciary money is that money which is accepted as a medium of exchange because of the trust between the payer and the payee.
- Example of Fiduciary money is Cheques, Banknotes, etc.

legal tenders - cannot be refused in transaction.
Ex. Notes and coins.

CURRENCY DEPOSIT RATIO (cdr)

- 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. It is a purely behavioral parameter which depends, among other things, on the seasonal pattern of expenditure.
- For example, cdr increases during the festive season as people convert deposits to cash balance for meeting extra expenditure during such periods.

❖ TOOLS OF MONETARY POLICY

Quantitative Instruments

1. Liquidity Adjustment Facility (Repo and Rev. Repo)
2. Open Market Operations
3. SLR, and CRR
4. Bank Rate
5. Marginal Standing Facility

Qualitative Instruments

1. Credit Rationing
2. Moral Suasion
3. Prompt Corrective Action(PCA)
4. Direct action by RBI on banks
5. Differential Interests Rates
6. Margin requirements

1. LIQUIDITY ADJUSTMENT FACILITIES (LAF)

- Monetary policy instrument that the RBI uses in order to influence the liquidity conditions in the market in the short term.
- Under the LAF window, the RBI uses various instruments to inject or absorb liquidity to or from the market respectively.
- Repo and Reverse repo rates are a part of RBI's "Liquidity Adjustment Facility (LAF)".
- The RBI introduced LAF as a result of the Narasimham Committee on Banking Sector Reforms (1998).

2. LONG TERM REPO OPERATIONS (LTRO)

- New policy tool used by the RBI to inject more liquidity into the Economy.
- Similar to the term repos, but with a longer maturity period of 1 year and 3 years.
- Through the LTRO, the RBI seeks to inject long term liquidity into the economy at a lower interest rate.
- The LTROs would be carried out through e-Kuber. (normal repo lending is short term ie 90 days)
- e-Kuber is the Core Banking Solution (CBS) of the RBI which enables each bank to connect their single current account across the country.

3. OPEN MARKET OPERATIONS

Buying and selling of bonds issued by the Government in the open market. This purchase and sale is entrusted to the Central bank on behalf of the Government.

There are two types of open market operations:

Outright OMO

- Outright open market operations are permanent in nature: when the central bank buys these securities (thus injecting money into the system), it is without any promise to sell them later.
- Similarly, when the central bank sells these securities (thus withdrawing money from the system), it is without any promise to buy them later. As a result, the injection/absorption of the money is of permanent nature.

Repurchase agreements- Repo and Reverse Repo

- They are for short term lending. Upto 90 days.
- Repo- The interest rate at which the money is lent to banks on behalf of securities.

- Reverse Repo- banks deposit funds near RBI.
- These agreement have a specification about the date and price at which it will be repurchased.
- Maturities : overnight, 7-day, 14- day, etc.
- This type of operations have now become the main tool of monetary policy of the Reserve Bank of India.

4. Cash reserve ratio:

- Ratio of total deposits of a commercial bank in India which is kept with the RBI.
- In cash form
- No interest earned
- Fixed by RBI in India

5. Statutory liquidity ratio :

- Ratio of total deposits of commercial banks, Which it maintains near itself.
- It is in government securities, gold and cash form.
- Usually in form of government securities.
- Fixed by - RBI

6. Bank Rate-

- The rate at which RBI gives long term loans to the commercial banks.
- By increasing the bank rate, loans taken by commercial banks become more expensive; this reduces the reserves held by the commercial bank and hence
- decreases money supply. A fall in the bank rate can increase the money supply.

7. Marginal standing facility (MSF) :

- Banks can borrow marginal fund from RBI (upto 2.5% of NDTL).
- Facility available to scheduled commercial banks only.
- Can use SLR securities to avail it.

NDTL - net demand and time liabilities. (demand and fixed time deposits).

❖ QUALITATIVE INSTRUMENTS

1. CREDIT RATIONING

- RBI seeks to limit the maximum amount of loans and advances the banks can provide and, also in certain cases, fix ceilings for specific categories of loans.
- Here banks limit the supply of loans to consumers.
- It is done when either there is shortage of funds or any bank is in a weak financial situation.

Credit Ceiling:

- With this instrument, RBI issues prior information or direction that loans to the commercial bank will be given up to a certain limit. In this case, a commercial bank will be tight in advancing loans to the public. They will allocate loans to limited sectors.

2. MARGIN REQUIREMENTS

- When a bank advances credit to its customers it does so against collateral. However there is a difference between the value of the security and the loan offered. This difference is called ‘Margin’.
- In case of inflation, the margin requirement is increased so that demand for loans are decreased
- In case of deflation, margin requirements are decreased so that demand for loans are increased.

- 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.

3. MORAL SUASION

- It refers to a method adopted by the Central Bank to persuade or convince the commercial banks to advance credit in the economic interest of the country.
- "Persuasion" without applying punitive measures. Just conveying message through formal/informal communication. Ex. RBI governor says that Banks should reduce lending. Although there is no order but banks follow it.
- Since it involves no administrative compulsion or threats of punitive action it is a psychological and informal means of selective credit control.

4. DIFFERENTIAL RATE OF INTEREST

- The differential rate of interest (DRI) is a lending programme launched by the government which makes it obligatory upon all the public sector banks in India to lend 1 per cent of the total lending of the preceding year to 'the poorest among the poor' at an interest rate of 4 per cent per annum.
- Ex. Loans on Kisan credit Cards.

5. DIRECT ACTION

- This step is taken by the RBI against banks that don't fulfill conditions and requirements. RBI may refuse to rediscount their papers or may give excess credits or charge a penal rate of interest over and above the Bank rate, for credit demanded beyond a limit.

6. PROMPT CORRECTIVE ACTION (PCA)

- Trigger points touched → Action.
- Trigger points - NPA, Capital available
- Action - Loan control, credit control.
- The PCA is triggered when banks breach certain regulatory requirements like minimum capital, and quantum of non-performing assets.
- To ensure that banks don't go bust, RBI has put in place some trigger points to assess, monitor, control and take corrective actions on banks which are weak and troubled.

7. CONSUMER CREDIT REGULATION

- RBI can issue rules to set the minimum/maximum level of down-payments and periods of payments for purchase of certain goods.

❖ UNCONVENTIONAL MONETARY POLICY INSTRUMENTS BY CENTRAL BANKS

1. ZERO INTEREST RATE POLICY (ZIRP)

- Policy also called 'Quantitative Easing'.
- This policy was adopted by the USA from 2008 in the wake of the financial crisis to inject money into the economy.
- Under this policy, the Fed Bank provides loans to the banks at low interest rates (0.25%) to spur investment level in the economy.

2. NEGATIVE INTEREST RATE POLICY (NIRP)

- In NIRP, the banks would be required to pay interest to the central bank if they park their surplus reserves.
- This encourages the banks to provide loans to the borrowers at cheaper rates instead of parking their surplus reserves with the Central Bank.
- This policy is usually followed in developed economies such as Japan, Denmark, Sweden, Switzerland etc

3. HELICOPTER MONEY

- It is an unconventional monetary policy tool, which involves printing large sums of money and distributing it to the public, to stimulate the economy during a recession (decline in general economic activity)
- Under such a policy, a central bank "directly increases the money supply and, via the government subsidies/ direct cash transfer, distributes the new cash to the population with the aim of boosting demand and inflation.".
- Ways- Subsidies, direct cash transfer, scholarships, cash incentivisation, interest free loans.
- The term was coined by American economist Milton Friedman. It basically denotes a helicopter dropping money from the sky.
- The idea here is to promote demand in the economy during recession.

4. MARKET STABILIZATION SCHEME (MSS)

- MSS is a policy tool used by the Reserve Bank of India to suck out excess liquidity from the market through issue of securities like T-Bills, Dated Securities etc. on behalf of the government.
- The RBI initiated the MSS scheme in 2004, to control the surge of US dollars in the Indian market, RBI started buying US dollars while pumping in rupee
- MSS was introduced to deal with the excess liquidity in the market which could lead to inflation.
- The issued securities under the MSS are government bonds and they are called Market Stabilization Bonds and these securities are owned by the government though they are issued by the RBI.

Post demonetization (2016) RBI has raised the ceiling for MSS 20 times to suck excess cash out of the banking system and help banks earn some return from the voluminous deposits they have garnered after the government's demonetization move.

5. STANDING DEPOSIT FACILITY SCHEME

- Standing deposit facility is a collateral free liquidity absorption mechanism which aims to absorb liquidity from the commercial banking system into RBI.
- Banks do not have to provide Govt. Securities to deposit funds near RBI.
- The scheme is aimed at helping RBI to manage liquidity in a better way, especially when the economy is flush with excess funds (as was seen after the demonetisation 2016).

ACCOMODATIVE STANCE

- Accommodative stance is taken when a central bank (such as RBI) attempts to expand the overall money supply to boost the economy when growth is slowing (as measured by GDP).
- The policy is implemented to allow the money supply to rise in line with national income and the demand for money.

❖ DEMONETISATION – CRITICAL ANALYSIS

- Demonetization is the act of removing legal status of any currency papers or coins.
- It is stripping a currency unit of its status as legal tender.

- Demonetization has been used as a tool to stabilize a currency and fight inflation, to facilitate trade and access to markets, and to push informal economic activity into more transparency and away from black market.

EARLIER DEMONETIZATIONS IN INDIA

- The first demonetisation was implemented in 1946(RBI demonetised Rs 1,000 and Rs 10,000 notes)
- The Morarji Desai government demonetised higher currency notes in 1978.

2016 Indian banknote demonetisation

- On 8 November 2016, the Government of India announced the demonetisation of all ₹500 and ₹1,000 banknotes of the Mahatma Gandhi Series. It also announced the issuance of new ₹500 and ₹2,000 banknotes in exchange for the demonetised banknotes.
- It was done to curtail the shadow economy, increase cashless transactions and reduce the use of illicit and counterfeit cash to fund illegal activity and terrorism

POSITIVE IMPACTS OF DEMONETISATION

- Increase in tax collection and considerable increase in the number of Income Tax Returns (ITRs) filed. ITR registered an increase of 24.7%.
- Tackling Black Money – The government has identified more than 37000 shell companies which were engaged in hiding black money and hawala
- Impacts on terrorism, Naxalism, and trafficking – Due to demonetisation, terrorist and Naxalite financing has stopped almost entirely.
- The note ban had led to a huge fall in sex trafficking. Since demonetisation, no high-quality fake currency notes were found/seized by intelligence operations.
- Increase in digital transactions – digital transactions have increased by around 50-55% points since demonetisation.
- Increase in digital transactions-RBI has to print fewer notes which save printing costs of the government.

NEGATIVE IMPACT OF DEMONETISATION

- Poor Planning – At the time of demonetisation, the high-value notes constitute 87.5% of the currency value.
- Impact on Jobs – As people ran out of money, they were not able to pay which resulted into economic slow down & supply-chain of informal sector got affected.
- Impacts on Savings – Households are now holding far more of their savings in cash than in the year prior to demonetisation.
- Impacts on Government expenditure: it costed the government around Rs 8000 crore during the period between July 2016-June 2017 for economy revival measures.
- Impacts on GDP – country’s growth rate, which was 7.5% in September 2016 declined to 5.7% in June 2017 – reduction of 1.5%.
- It is still apparent that the corruption has not yet suppressed since demonetisation.
- The cash-GDP ratio has reached levels similar to the period before demonetisation.
- Stress in agriculture have begun to appear because of demonetization pertaining to cash is the dominant mode of transaction in the agriculture sector.
- Banks are not in a position to considerably increase lending; their net interest income has decreased. Worsening their capital situation and their NPA situation got worse.