UNIT 2: MONEY:-Functions of money, Quantity theory of money; determination of money supply and demand; credit creation;tools of monetary policy.

GE 202(Sem.II)

Ms.Monica,

(monicadeepak26@gmail.com)

AssistantProfessor,

Dept. of Eco.,

Patna Women's College

Quantity Theory of Money

Fisher's Cash Transaction Approach

Cambridge Cash Balance Approach

- Fisher has explained his theory in terms of his equation of exchange:
- $PT = MV + M'V'$
- Where
- P = price level, or $1/P$ = the value of money;
- M = the total quantity of legal tender money;
- V = the velocity of circulation of M;
- M' – the total quantity of credit money;
- V' = the velocity of circulation of M;
- T = the total amount of goods and services exchanged for money or transactions performed by money.

Cambridge Equation of Cash Balance Approach:

- **Equation of Marshall :**
  $M=kPY$
- **Equation of Pigou:**
  $P=kR/M$
- **Equation of Robertson:**
  $P=M/kT$
- **Equation of Keynes:**
  $n=pk$

Determination of Money Supply

- There are Two theories of determination of money supply:-

I. Exogeneously determined by Central Bank

II. Endogeneously determined by changes in economic activity

Reserve Requirement Ratios: (Minimum Cash Reserve Ratio) An increase in required reserve ratio ,reduces money supply with commercial banks , as when the commercial banks need to keep more in reserve their credit creation ability reduces and vice –versa.

Borrowing Rates: Commercial Banks can borrow from central bank .there are different ways are:-Bank rate allows commercial bank to borrow for more than 90 days ,while repo rate allow commercial banks to borrow for a period between 1 to 14 days, while LAF allow loan for 24 hours .
↑ rate ↓Money supply and vice versa

Level of Bank Reserves: Central Bank requires all commercial banks to hold reserve equal to fixed percentage i.e Required Reserve .
ER(Excess Reserve)=Total Reserve – Required Reserve
ER is important for determination of Money supply.

Public's desire to hold currency and deposits: If people are in a habit of keeping less in cash and more in deposits with commercial banks ,the money supply will be large.

Demand for Money

Classical Approach

Keynesian Approach

Post –Keynesian Approach

- Classical Approach:- This transaction demand for money is because money acts as a medium of exchange and facilitates the exchange of goods and services. $MV=PT$
- Neo-Classical Theory:-Cambridge economist Marshall and Pigou $Md= KPy$

It makes demand for money a function of money income and only of it.

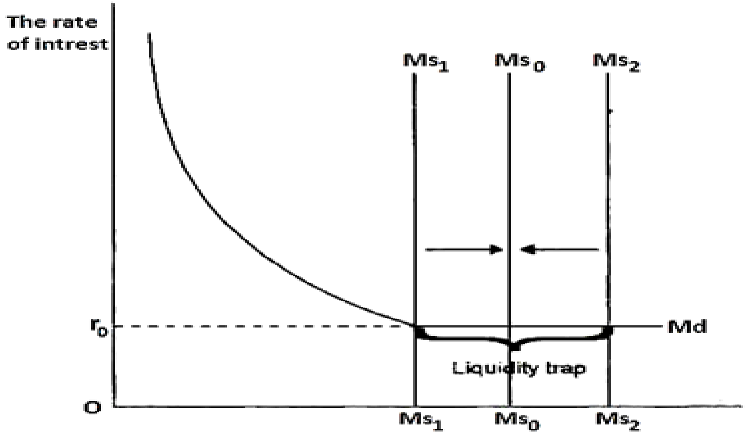
- Keynesian Approach:- Demand for money has three motives:-

I. The transactions Demand

II. The Precautionary demand

III. The Speculative demand

- <u>Transactions Demand for money</u> :It arises from medium of exchange function of money in making regular payments for goods and services. $L_t = K.Y$ Modern view of transactions demand $L_t = f(Y,r)$
- <u>Precautionary Demand for Money</u>:- Desire of people to hold cash balances foe unforseen contigencies such as sickness,accidents and other uncertain perils.
- <u>Speculative Demand for Money</u>:-The desire to hold ones resources in liquid form in order to take advantage of market movement regarding changes in rate of interest (or bond prices).The demand for money under speculative otive is a function of current rate of interest i.e demand increases as interest rate falls and vice versa.



Liquidity Trap

Liquidity Trap: At very low rate of interest ,speculative demand for money is infinitely elastic i.e at very low rate of interest people will hold with them inactive balances.Expansion in money supply gets trapped in liquidity trap and therefore cannot effect rate of interest

- Post Keynesian approach:-Prof. Baumol has analysed the interest elasticity of transactions demand for money on the basis of inventory approach.Further Prof. Tobin has given an alternative to keynes speculative motive that liquidity preference is a behaviour towards risk. Friedman formulated that demand for money is not only a function of income and rate of interest but also wealth.

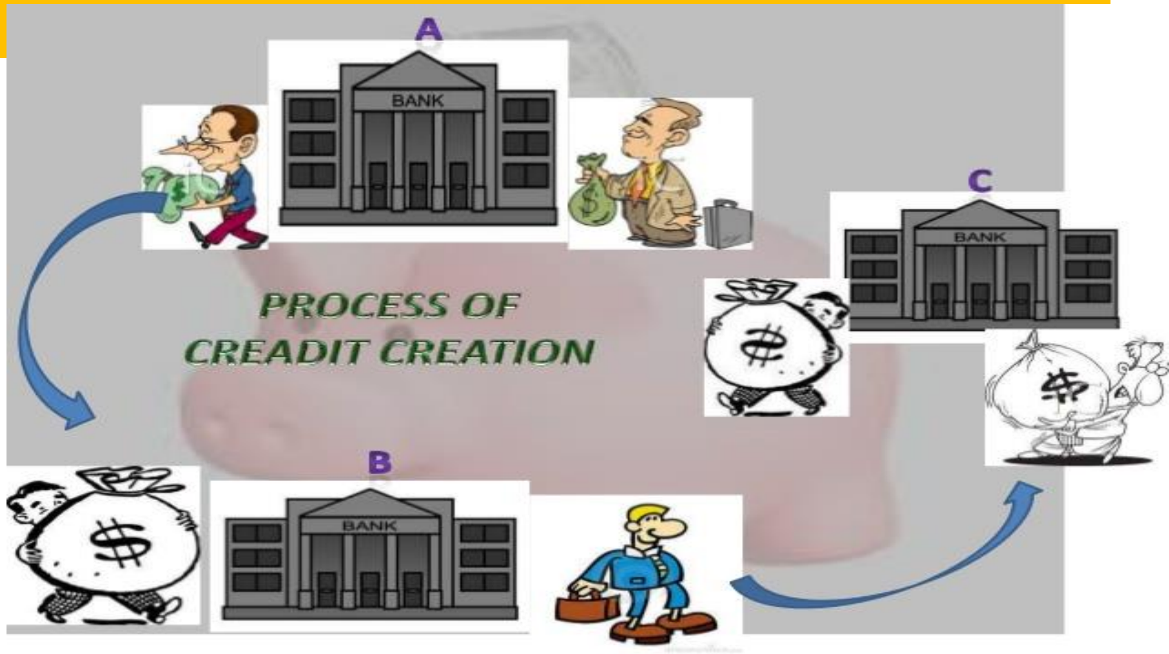
Credit Creation

The creation of credit or deposit is one of the most important functions of commercial banks.Banks aim at earning profits. For this purpose ,they accept cash in demand deposits and advance a loan on credit to customers.When a bank advances a loan,it does not pay the amount in cash but opens a current account in his name and allows him to withdraw the required sum by cheques.In this way the bank creates credit or deposits.

Demand Deposits arise in two ways:

Primary deposit → Customers deposits currency with commercial banks

Derivative deposit → When banks advances loans, discount bills, provide overdraft facilities



Banks know by experience that all depositors do not withdraw their money simultaneously.

Some withdraw while other deposit on the same day.So by keeping a small cash in reserve for day-to-day transactions,the bank is able to advance loans on the basis of excess reserves.

Total deposit created by banking system is given by $\frac{1}{r}.D$

Tools of Monetary Policy

Quantitative Instruments

➢ **BANK RATE POLICY**:- the rate at which the central bank (i.e RBI) rediscounts bills and prepares of commercial banks or provides advance to commercial banks against approved securities. If the RBI increases the bank rate than it reduce the volume of commercial banks borrowing from the RBI(It deters banks from further credit expansion) and vice versa.

➢ **Open Market Operation (OMO):-**The open market operation refers to the purchase and/or sale of short term and long term securities by the RBI in the open market. If the RBI sells securities in an open market, commercial banks and private individuals buy it. This reduces the existing money supply as money gets transferred from commercial banks to the RBI.

➢ **Variation in the Reserve Ratios (VRR) :-**The Commercial Banks have to keep a certain proportion of their total assets in the form of Cash Reserves. These reserve ratios are named as Cash Reserve Ratio (CRR) and a Statutory Liquidity Ratio (SLR). Any change in the VRR (i.e. CRR + SLR) brings out a change in commercial banks reserves positions. Changes in the VRR helps in bringing changes in the cash reserves of commercial banks and thus it can affect the banks credit creation multiplier.

Qualitative instruments

1. **Fixing Margin Requirements:-**The margin refers to the "proportion of the loan amount which is not financed by the bank". A change in a margin implies a change in the loan size.
2. **Consumer Credit Regulation:-**Under this method, consumer credit supply is regulated through hire-purchase and installment sale of consumer goods.
3. **Publicity:-**Central Bank (RBI) publishes various reports weekly and monthly bulletins)stating what is good and what is bad in the system.
4. **Credit Rationing:-** Credit is rationed by limiting the amount available for each commercial bank. For certain purpose, upper limit of credit can be fixed and banks are told to stick to this limit.
5. **Moral Suasion:-**It is a suggestion to banks. Commercial banks are informed about the expectations of the central bank through a monetary policy. Central banks can issue guidelines for commercial banks regarding reducing credit supply for speculative purposes.
6. **Direct Action:-**RBI can impose an action against a bank. Central bank can penalize a bank by changing some rates.

THANK YOU!