* Unit - 3 : Theories of Money Supply

- Determination of money supply

→ 2 alternate theories of determination of money supply.

first view	Second view
(Money supply is determined by central bank)	(Money supply is determined by changes in eco. activities)

- Other approach to determine money supply

→ Money multiplier approach by Milton friedman & Anna Schwartz (1963)

→ According to this approch, the total supply of nominal money in economy is determined by joint ~~beha~~ behaviour of central bank, commercial banks and public

→ According to this approach, 3 factors are ~~imm~~ immediate determinants of money supply:

(a) Stock of high powered money (H)

(b) Reserve Ratio = $\left(r = \frac{R}{D}\right)$

(c) Currency - Deposit ratio $\left(c = \frac{C}{D}\right)$

(a) The Behaviour of Central bank

The total supply of nominal money in the ecn. will vary directly with the supply of nominal high powered money issued by the central bank.

(b) Behaviour of Commercial Banks.

→ It is reflected by reserve ratio

Reserve ratio ↑ Money Supply ↓ Money multiplier ↓
& Vice Versa.

- Excess Reserves = Total reserve - SLR - CRR

Required Reserves → SLR, CRR

* The banking systems excess reserve ratio is negatively related to market int. rate.

(c) The Behaviour of Public

→ reflected by CDR (measure of proportion of currency held by public in relation to demand deposits in banks)

→ CDR ↑ Money supply ↓ Money multiplier ↓
CDR Money supply ↑ Money multiplier ↑

→ When bank deposits are being converted into currency, banks will be able to create only less credit money & vice verca.

→ Time deposit - Demand deposit ratio shows how much money is kept as time depopits compared to demand deposits.

$$\text{Time deposit - Demand deposit ratio} = \frac{TD}{DD}$$

→ $\frac{TD}{DD}$ ↑ Money multiplier ↑
& vice verca.

- <u>Other formulae</u>

$$m = \frac{1+c}{r+c} \quad \text{where} \quad c = \frac{C}{D}$$

$$r = \frac{\text{Reserve}}{D}$$

If there are excess reserves then

$$m = \frac{1+c}{r+c+e} \times H$$

e = excess reserve ratio
H = High powered money.

o Effect of govt. expenditure on Money Supply.

→ Whenever Central bank and state govt. Cash balances fall short of min. requirement, they are eligible to avail the facility called ways & Means Advances.

→ When RBI lends to the govt, it leads to generation of excess reserves (i.e. Excess balances of commercial banks with RBI)

→ Govt. incurs expenditure → Govt. balances & with RBI debited

Crediting the receiver (for eg. Salary ~~or~~ A/c of govt. employer) account with commercial banks → Excess reserve → Money supply ↑

→ The credit multiplier or deposit multiplier or deposit expansion multiplier, describes the amt of additional money created by commercial bank through the process of lending the available money, if has excess of central banks reserve requirements.

→ Credit Multiplier = $\frac{1}{\text{Required reserve ratio}}$