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Money Supply

Function of Money

1. Store of value
2. Unit of Account
3. Medium of exchange
4. Standard of deferred payment.

Measures / Components of Money Supply :

M_1 → most liquid form of money (narrow money)

M_2

M_3 → Broad Money

M_4 → least liquid form of money

$D = DD + OD$

$M_1 = C + DD + OD$

$M_2 = M_1 +$ post office savings.

$M_3 = M_1 +$ Net time deposits of Banks.

$M_4 = M_3 +$ Total deposits of PO savings Organisation (excluding National saving Certificate or NSC)

M_0 ⇒ High powered money or monetary base

M_0 ⇒ High powered money or Monetary base or reserve money.

H , B

M_0 (H or B) = Currency in circulation + Banker's deposit with the RBI + other deposit with the RBI.

$M_1 = C + D$

M_0 or $B = C + R$

① CR ⇒ Cash (Currency) - Deposit ratio (C/D)

↳ it is the amount of currency (c) people hold as a fraction of their holding of deposits (D)

It reflects the preference of public about the form of money they wish to hold.

factors:

① CR will vary inversely with the rate of interest on savings because economic agents like to hold more deposits and less cash at higher rate of interest.

② Cost and convenience of obtaining cash.

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Reserve Deposit / Required Reserve Ratio (Deposit)

is the amount of money (deposit a bank is required to keep with themselves as Reserve.

ie $RR = \frac{R}{D}$

B/H / Mo

$B = C + R$ — (1)

$M = C + D$ — (2)

Dividing (2) by (1)

$$\frac{M}{B} = \frac{C+D}{C+R}$$

$$\frac{\frac{M}{B}}{} = \frac{\frac{C+D}{D}}{\frac{C+R}{D}}$$

$$\frac{M}{B} = \frac{\frac{C}{D} + 1}{\frac{C}{D} + \frac{R}{D}}$$

$$\frac{M}{B} = \frac{cr + 1}{cr + rr}$$

$$B$$

$$M = B\left(\frac{cr+1}{cr+rr}\right) \qquad cr+rr$$

Let $\frac{cr+1}{cr+rr} = m$ = money multiplier

$$M = B \cdot m$$

cr and rr

$\therefore \uparrow M \propto B \uparrow$

M → cr, rr, D

$cr \downarrow = \frac{C}{D} \downarrow$

$C < D$

more deposits with bank → more money available to lend out. → money supply will rise

cr and M_s inversely related

$rr \uparrow = \frac{R}{D} \uparrow \Rightarrow R > D \Rightarrow$ less money available for lending

rr and MS is inversely related ⇒ money supply will decrease.

$B \propto M \Rightarrow$ directly related.

B ∝ M ⇒ directly related.

Instruments of Anti-Inflationary policies measure (~~Hike it~~ reduce or control money supply) by RBI:

1. CR ↑
2. RR ↑
3. Discount Rate / Bank rate ↑ ses.
4. Repo-rate
5. Reverse Repo-rate
6. Open-market operations
7. SLR ⇒ Statutory Liquidity Ratio.