# <u>Supply of Money, Money Multiplier and High Powered Money</u>

E- Content
B.A. IV Semester
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Money supply refers to the total sum of money available to the public at given point of time, here public means households, firms and institutions i.e. other than banks and government. The reason behind keeping the banks and the Government separate from the public is that the formers are **producer and creator of money** for the public, while the latter are the one who **use money** to fulfil their demands. The money held by the Government and the banks are not used for transaction or speculative purposes. So, by money supply we mean the stock of medium of exchange available to the public in the form of **Currency** and **Demand deposits** with the public for the economic activities in the country. (Money supply is a **stock concept** and it differs from national income in a way that **national income is a flow** representing the value of goods and services produced in a year.)

The two basic components of supply of money are **1.** Currency issued by the RBI (Central Bank) minus cash reserves with the bank in order to determine the total currency with the public. Cash reserves are subtracted because they remain with the bank and are not used for the payments of goods or for any transactions of the Commercial banks. It should be made clear here that the currency, coins and rupee notes issued by the RBI are, on the basis of the **'fiat'** of the government that is why now the currency is **no more promissory note** it is a **'legal tender' or fiat (**order**) currency** and no one can refuse to accept it in the country for the transactions. **2.** The other component of money supply is demand deposits of public with the commercial banks. Deposits with the banks are normally of two categories i.e. demand deposits and time deposits. Demand deposits are the one which can be withdrawn by the public from the commercial banks as and when needed by cheques (or ATMs) from their accounts. Cheques are known as **fiduciary money** or **promissory notes** they are not legal tenders but are treated as money on the basis of trust of the issuing person.

From April 1977, the Reserve Bank of India has adopted four concepts of money supply in its analysis of the quantum of and variations in money supply. These four concepts of money supply are:-

1. **Money Supply M1 or Narrow Money**. This money supply is most liquid money supply as the money included in it is very easily used as medium of exchange. This is composed of
   **M1= C + DD + OD**

   C: - Currency with the public
   DD: - Demand Deposits with the commercial banks and co-operative banks
   OD: - Other deposits held by the public with RBI (e.g. Deposits of institutions like NABARD,IDBI, IFCI etc. DD of IMF and world bank, foreign governments etc).

2. Money Supply M2 this is a broader concept of money supply than M1

**M2 = M1 + Saving deposits with the post office** ( SD with post office are not as liquid as DD with banks as they cannot be drawn by issue of cheques but certainly more liquid than time deposits with banks)

3. **Money Supply M3 or Broad Money** ( Till April 1977 it was referred as Aggregate Monetary resource or AMR)

**M3 = M1 + Time deposits with the banks**

RBI in its analysis of growth of money supply and its effect on economy uses M3. TDs are not liquid but as good as liquid, because TDs are used as securities against loan so the money comes in the economy for this route moreover these TDs can be liquidated any time by surrendering some rate of interest accrued on these TDs.

**M4 = M3 + Total deposits with the Post Office – National Savings Certificates**

The two important determinant of money supply are the amount of high powered money, also known as Reserve Money by the RBI and the size of money multiplier.

**High Powered Money (H).**

The high powered money is denoted by H and it consists of the currency issued by the Government and the RBI which is denoted by C, part held by bank reserves and deposited to RBI is represented by RR, a part held by banks themselves in extra reserves ER.

H = C + RR + ER………………….. (1)

M = D + C …………………………. (2) Here M is M1

Dividing Eq. (2) by Eq. (1)

$$\frac{M}{H} = \frac{D + C}{C + RR + ER} \quad \ldots\ldots\ldots\ldots\ldots\ldots \ (3)$$

Dividing right hand side of Eq. (3) by D

$$\frac{M}{} = \frac{D/D + C/D}{}$$

$$\frac{H}{} \quad C/D + RR/D + ER/D$$

$$\frac{\mathbf{M}}{\mathbf{H}} = \frac{\mathbf{1 + Cr}}{\mathbf{Cr + RRr + ERr}}$$

**Money Multiplier is ratio of total money supply to the high powered money, therefore m = M/H**

**Therefore**

$$\mathbf{m = \frac{1+ Cr}{Cr + RRr + ERr} \quad ..... (Eq\ 4)}$$

**C/D……………= Cr Cash Deposit Ratio**

**RR/D…………= RRr Reserve Ratio**

**ERR/D………. = ERr Extra Reseve Ratio**

**High powered money H** $= \frac{Cr + RRr + ERr}{1 + Cr} \times M$

**Money Supply M** $= \frac{1 + Cr}{Cr + RRr + ERr} \times H$

So, the supply of money **M = m.H**

We can infer from the above equations that the money supply will increase:

1. When the high powered money H increases i.e. when the reserve ratios increase.
2. When the currency deposit ratio decreases
3. When the currency reserves-deposit ratio of the commercial banks falls.

Suggested Readings:


1. Money, Banking, International Trade and Public Finance by M.L. Jhingan
2. Macroeconomics by H.L. Ahuja