FOR BBA

1. Subject Name: Macroeconomics
2. Semester/Year: Fourth (Semester-IV)
3. Name of the Teacher: Dr. Sudip Ghosh
4. Name of the Topic: H-Theory of Money Multiplier (Money: Unit 3)

H-Theory of Money Multiplier

Appointments

The current practice is to explain the determinants of the money supply in terms of the monetary base or high-powered money (H). High-powered money is the sum of commercial bank reserves and currency (notes and coins) held by the public. High-powered money is the base for the expansion of bank deposits and creation of money supply.

Work to do

The supply of money varies directly with changes in the currency base and inversely with the currency and reserve ratios. The use of high-powered money consists of the demand for commercial banks for the legal limit or the required reserves with the Central Bank and excess reserves and the demand of the public for currency.

Thus, high powered money

$$H = C + RR + ER$$

Where C = Currency with public
RR = Required Reserve
ER = Excess Reserve

The formal relation between the money supply and high-powered money can be stated as follows.

The money supply (M) consists of deposits of commercial banks (D) and currency held by public (C). Thus, the supply of money

$$M = D + C \quad \ldots (I)$$

is equal to C+RR+ER (II) i.e. the relation between M and H High-powered money (H), can be expressed as the ratio of M to H. So dividing equation (I) by II

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

Dividing the numerator and denominator of the right side of the equation (III) by D

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

by substituting Cr for C/D, RRr for RR/D and ERr for ER/D

in equation (iv) we get

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

Thus high powered money

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

and money supply

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

If there is an increase in any one of the ratios (Cr, RRr, or ERr), there would be an increase in the demand for high-powered money.

Money multiplier is the process through which banks creates more money through using its excess reserves. Banks receive two kinds of money deposits as follows

1. Demand deposits
2. Time deposits / Time liabilities

When banks receive money deposits from public they

further lends it to earn interest and out of that interest earning they share some portion with public by providing interests on deposits. The difference between the interest which banks earn and the interest which banks pays to depositors is known as spread.
RBI creates money in banks via reserve money. As ~~money~~ mandated by RBI banks keeps aside some portion of public deposits as part of reserve requirement (in form of CRR and SLR) and lends out rest of the deposits. This way banks create money from money and this is how money multiplier works.

Appointments

Phone