

Money Supply and Federal Reserve Structure in India

POE

Chapter 23, 8th edition

Case and Fair

What is Money?

“Money is whatever is generally accepted in exchange for goods and services — accepted not as an object to be consumed but as an object that represents a temporary abode of purchasing power to be used for buying still other goods and services.”

— Milton Friedman (1992)

What is Money?

- ***A medium of exchange:***
an asset used to buy and sell goods and services
- ***A store of value:***
an asset that allows people to transfer purchasing power from one period to another
- ***A unit of account:***
a unit of measurement used by people to post prices and keep track of revenues and costs

Why is Money Valuable?

- *value for other commodities*: the demand (*for money*) relative to its supply.
- demand money because it reduces the cost of exchange.
- If the purchasing power of money is to remain stable over time, its supply must be limited.
- When the supply of money grows rapidly relative to goods and services, its purchasing power will fall.

Deposits

Deposits are moneys accepted by various agencies from others to be held under stipulated terms and conditions.

- **Demand Deposits:** Deposits payable on demand through cheque or otherwise.
- **Time Deposits:** All other deposits which are not payable on demand and have fixed term to maturity.
- **Post office Deposits:** Saving deposits (withdrawable on demand by withdrawal slips) and time deposits (recurring deposits)

Measures of Money Supply

- Two basic measurements of the money supply are ***M1*** and ***M2***.

$$M1 = C + DD + OD;$$

C = currency held by public, DD = Net demand deposits, and OD = other deposits (traveler's checks).

M2 (a broader measure of money)

$$M2 = M1 + \text{Savings deposits with post office}$$

$$M3 = M1 + \text{Net Time deposits of banks}$$

$$M4 = M3 + \text{Total deposits with PO (Excluding NSCs)}$$

Credit Cards versus Money

- Money is an asset.
- The use of a credit card is merely a convenient way to arrange for a loan.
- Credit card balances are a liability.
- Thus, credit card purchases are not money.

Banking

- **The banking industry includes:**
 - commercial banks,
 - Savings and
 - credit unions.
- **Banks are profit-seeking institutions:**
 - Banks accept deposits and use part of them to extend loans and make investments. Income from these activities is their major source of revenue.
- **Banks play a central role in the capital market (*loanable funds market*):**
 - They help to bring together people who want to save for the future with those who want to borrow for current investment projects.

How Banks Create Money

- The lower the percentage of the reserve requirement, the greater the potential expansion in the money supply resulting from the creation of new reserves.
- Banks hold some proportion of their deposits as reserves, in the form of currency or central bank deposits, and lend out the rest.
- **Money Multiplier:** It calculates the maximum amount of money that an initial deposit can be expanded to with a given reserve ratio.

The money multiplier, $m = 1/r$, is the inverse of the reserve requirement.

Money Creation by Commercial banks

- Suppose CRR is fixed at 10%. Now, a person deposited Rs. 1000 to bank A. Bank A will reserve 100/- and 900/- will be lent out as investment and that eventually will be deposited to another bank, suppose bank B. Again B will hold 90/- as reserve and 810/- will be lent out. And it will continue till cash becomes zero.
- **Money creation by commercial bank** = Rs. 1000 [$1 + 9/10 + (9/10) * (9/10) + (9/10) * (9/10) * (9/10) + \dots$ GP series]

$$= \text{Rs. } 1000 [1 / (1 - (9/10))] = \text{Rs. } 10000$$

Bank	Asset	Liability	Lent Out
A	Rs. 1000	Rs. 100	Rs. 900
B	Rs. 900	Rs. 90	Rs. 810
C	Rs. 810	Rs. 81	Rs. 729
etc	etc	etc	etc
Total	Rs. 10000		

Reserve Bank of India

- RBI Act in 1934 established the Reserve Bank and set in motion a series of actions culminating in the start of operations in 1935.
- The role and functions have undergone numerous changes, as the nature of the Indian economy and financial sector changed.

1935	Operation of RBI begins
1949	Nationalization
1950	Active agent for economic development
1966	Cooperative banks under RBI
1969	Nationalization of 14 banks
1973	Foreign Exchange Regulation Act
1974	Introduction of Priority sector lending
1975	Regional Rural Bank set up
1985	Financial Market Reforms
1993	Exchange rate becomes market determined
1994	Board for Financial Supervision set up

Role of RBI

- Currency authority
- Banker to banks
- Banker to the Central and State Governments
- Oversight of the payment and settlement systems
- Management of paper currency standard
- Monitoring the public debt
- Developmental role
- Research and statistics

Main Functions

- **Monetary Authority:**
- Formulates, implements and monitors the monetary policy.
- **Objective:** maintaining price stability and ensuring adequate flow of credit to productive sectors.
- **Regulator and supervisor of the financial system:**
- Prescribes broad parameters of banking operations within which the country's banking and financial system functions.
- **Objective:** maintain public confidence in the system, protect depositors' interest and provide cost-effective banking services to the public.

- **Manager of Foreign Exchange**
- Manages the Foreign Exchange Management Act, 1999.
- **Objective:** to facilitate external trade and payment and promote orderly development and maintenance of foreign exchange market in India.

Issuer of currency:

- Issues and exchanges or destroys currency and coins not fit for circulation.
- **Objective:** to give the public adequate quantity of supplies of currency notes and coins and in good quality.

Developmental role

- Performs a wide range of promotional functions to support national objectives.
- **Related Functions**
- Banker to the Government: performs merchant banking function for the central and the state governments; also acts as their banker.
- Banker to banks: maintains banking accounts of all scheduled banks.

Financial Market

Money Market

- Notional
- Credit Market (Call Money, Bill Markets and Bank Loans)

Capital Market

- Stock Market
- (Govt. Bonds and Corporate Bonds)
- Loan from banks and /NBFIs

Major Financial Assets held by public

- Currency
- Demand Deposits
- Time Deposits with Banks
- Post office deposits
- Other small savings
- Non banking company Shares
- LIC
- Provident fund and pension fund
- UTI units

Basic Instruments of Monetary Policy

- **Cash Reserve Ratio (CRR):** The amount of funds that the banks have to keep with the RBI.
- **Statutory Liquidity Ratio (SLR):** refers to the amount that the commercial banks require to maintain in the form of gold or govt. approved securities before providing credit to the customers. Statutory Liquidity Ratio is determined and maintained by the Reserve Bank of India in order to control the expansion of bank credit.
- **Repo rate:** The rate at which the **RBI** lends money to commercial banks is called repo rate. It is an instrument of **monetary policy**. Whenever banks have any shortage of funds they can borrow from the RBI.
- **Reverse repo rate:** the rate at which the **RBI** borrows money from commercial banks. Banks are always happy to lend money to the RBI since their money are in safe hands with a good interest.

Security Markets

Corporate
securities

Government
securities

New Issues and Old
Issues

Primary and
secondary markets

Organized Stock
Exchange or over
counter market

Over counter market