The Monetary System

Chapter 29

The Meaning of Money

Money is the set of assets in the economy that people regularly use to buy goods and services from other people.

Three Functions of Money

- Money has three functions in the economy:
  - Medium of exchange
  - Unit of account
  - Store of value

Medium of Exchange

A medium of exchange is anything that is readily acceptable as payment.

Unit of Account

A **unit of account** is the yardstick people use to post prices and record debts.

Store of Value

A store of value is an item that people can use to transfer purchasing power from the present to the future.

Liquidity

Liquidity is the ease with which an asset can be converted into the economy’s medium of exchange.

The Kinds of Money

- Commodity money takes the form of a commodity with intrinsic value.
  - Examples: Gold, silver, cigarettes.
- Fiat money is used as money because of government decree.
  - It does not have intrinsic value.
  - Examples: Coins, currency, check deposits.

Money in the Economy

- Currency is the paper bills and coins in the hands of the public.
- Demand deposits are balances in bank accounts that depositors can access on demand by writing a check.

Money in the Economy

Measure		What's Included
M1	Narrow Money	Currency Traveler's checks Demand deposits Other checkable deposits
M2	Broad Money	Everything in M1 Saving deposits Small time deposits Money market mutual funds A few minor categories

NOTE: M3 = M2 + Large Time Deposits

The Central Reserve

- The Reserve Bank of India (RBI) serves as the nation’s central bank.
  - It is designed to oversee the banking system.
  - It regulates the quantity of money in the economy.

Three Primary Functions of the RBI

- Regulates banks to ensure they follow central laws intended to promote safe and sound banking practices.
- Acts as a banker's bank, making loans to banks and as a lender of last resort.
- Conducts monetary policy by controlling the money supply.

Open-Market Operations

- The money supply is the quantity of money available in the economy.
- The primary way in which the Centre changes the money supply is through open-market operations.
  - The RBI purchases and sells government bonds.

Open-Market Operations

- To decrease the money supply, the RBI sells government bonds to the public.
- To increase the money supply, the RBI buys government bonds from the public.

Banks and The Money Supply

Banks can influence the quantity of demand deposits in the economy and the money supply.

Banks and The Money Supply

- Reserves are deposits that banks have received but have not loaned out.
- In a fractional reserve banking system, banks hold a fraction of the money deposited as reserves and lend out the rest.

Money Creation

When a bank makes a loan from its reserves, the money supply increases.

Money Creation

- The money supply is affected by the amount deposited in banks and the amount that banks loan.
  - Deposits into a bank are recorded as both assets and liabilities.
  - The fraction of total deposits that a bank has to keep as reserves is called the reserve ratio.
  - Loans become an asset to the bank.

Money Creation

- This T-Account shows a bank that…

…accepts deposits,

…keeps a portion as reserves,

…and lends out the rest.

- It assumes a reserve ratio of 10%.

First National Bank

Assets	Liabilities
Reserves $10.00	Deposits $100.00
Loans $90.00	
Total Assets $100.00	Total Liabilities $100.00

Money Creation

- When one bank loans money, that money is generally deposited into another bank.
- This creates more deposits and more reserves to be lent out.
- When a bank makes a loan from its reserves, the money supply increases.

Money Creation

First National Bank

Assets	Liabilities
Reserves $10.00	Deposits $100.00
Loans $90.00	
Total Assets $100.00	Total Liabilities $100.00

Second National Bank

Assets	Liabilities
Reserves $9.00	Deposits $90.00
Loans $81.00	
Total Assets $90.00	Total Liabilities $90.00

Money Supply = $190.00!

The Money Multiplier

How much money is eventually created in this economy?

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The Money Multiplier

The **money multiplier** is the amount of money the banking system generates with each rupee of reserves.

The Money Multiplier

How much money is eventually created in this economy?

Original deposit = $ 100.00
First National lending = $ 90.00 [=0.9 x $100.00]
Second National lending = $ 81.00 [=0.9 x $90.00]
Third National lending = $ 72.90 [=0.9 x $81.00]

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Total money supply = $1,000

The Money Multiplier

The money multiplier is the reciprocal of the reserve ratio:

$$M = 1/R$$

- With a reserve requirement, $R = 20\%$ or $1/5$,
- The multiplier is 5.

RBI's Tools of Monetary Control

- The RBI has three tools in its monetary toolbox:
  - Open-market operations
  - Changing the reserve requirement
  - Changing the discount rate

Open-Market Operations

- The RBI conducts open-market operations when it buys government bonds from or sells government bonds to the public:
  - When the RBI buys government bonds, the money supply increases.
  - The money supply decreases when the RBI sells government bonds.

Changing the Reserve Requirement Rate

- The reserve requirement is the amount (%) of a bank's total reserves that may not be loaned out.
  - Increasing the reserve requirement decreases the money supply.
  - Decreasing the reserve requirement increases the money supply.

Changing the Discount Rate

- The discount rate is the interest rate the RBI charges banks for loans.
  - Increasing the discount rate decreases the money supply.
  - Decreasing the discount rate increases the money supply.

Problems in Controlling the Money Supply

- The RBI’s control of the money supply is not precise.
- The RBI must wrestle with two problems that arise due to fractional-reserve banking.
  - The RBI does not control the amount of money that households choose to hold as deposits in banks.
  - The RBI does not control the amount of money that bankers choose to lend.

Summary

- Money serves three functions in an economy: as a medium of exchange, a unit of account, and a store of value.
- Commodity money is money that has intrinsic value.
- Fiat money is money without intrinsic value.

Summary

- It controls the money supply through open-market operations or by changing reserve requirements or the discount rate.

Summary

- When banks loan out their deposits, they increase the quantity of money in the economy.
- Because the RBI cannot control the amount bankers choose to lend or the amount households choose to deposit in banks, the RBI’s control of the money supply is imperfect.