DERIVATIVES - UNIT 1

Introduction to Derivatives

- **Meaning**: A derivative is a financial instrument whose value is derived from an underlying asset (stocks, bonds, commodities, currencies, interest rates, or market indices).
- **Purpose**: They allow investors to **hedge risks, speculate** on price movements, or gain access to assets/markets otherwise difficult to trade.

Classification & Types of Derivatives

- **By underlying asset**:
  - Equity derivatives (based on shares/indices)
  - Commodity derivatives (oil, gold/metals, agricultural products)
  - Currency derivatives (foreign exchange rates)
  - Interest rate derivatives (bonds, swaps)

By instrument type:

- **Forward contracts**: Customized agreements to buy/sell derivative contract at a future date.
- **Futures contracts**: Similar to forwards but more standardized, exchange-traded forwards.
- **Options**: Right but not the obligation to buy/sell at a set price. Common types are call option and put option.
- **Swaps**: Agreements to exchange cash flows (e.g., fixed vs. floating interest).

Uses of Derivatives

- **Hedging**: Protecting against adverse price movements by taking opposite position in the physical and derivative market.
- **Speculation**: Profiting from expected changes in asset prices. Beneficial for active investors and not passive investors.
- **Arbitrage**: Exploiting price differences across markets and making profit from the price differences.
- **Risk management**: Derivative provides different techniques like hedging, long or short sell, stop loss etc to control exposure.

Need for Derivative Markets

- Provide liquidity and depth to financial markets.
- Enable price discovery of underlying assets.
- Facilitate risk transfer between participants.

- Support innovation in financial products.
- Gives more flexibility as compared to directly dealing in stocks.

Characteristics of Forward Transactions

- Customized contracts between two parties.
- Traded over-the-counter (OTC), not on exchanges.
- Carry counterparty risk (possibility of default).
- Settlement occurs at maturity, not daily.

Hedging & Risk Sharing

- **Hedging**: Using derivatives to offset potential losses by simultaneously buying and selling in physical market and derivative market and off setting the loss. (e.g., an airline company hedging fuel costs with oil futures).
- **Risk sharing**: Distributing risk among market participants, allowing firms to focus on core operations.

Effects of Derivatives Markets on the Financial System

- **Positive**:
    - Enhance market efficiency and liquidity.
    - Improve risk management practices.
    - Aid in global integration of financial markets.
- **Negative (if misused)**:
    - Can amplify systemic risk (uncontrollable risk)
    - May encourage excessive speculation.
    - Complex instruments can reduce transparency.