#### **Financial Derivatives:**

**Financial derivatives** are financial instruments whose value is derived from the value of an underlying asset. This underlying asset can be anything from stocks, bonds, commodities, currencies, or even interest rates.

# **Purpose of Derivatives**

- Risk Management: Derivatives are primarily used to manage risk. For instance, a company
  can use futures contracts to hedge against potential price fluctuations in the commodities it
  uses.
- **Speculation:** Derivatives can also be used for speculative purposes. Traders can buy or sell derivatives in anticipation of price movements and profit from them.
- **Arbitrage:** Derivatives are used for arbitrage, which involves simultaneously buying and selling assets in different markets to profit from price discrepancies.

# **Types of Financial Derivatives**

Financial derivatives are categorized into three main types:

### 1. Futures Contracts

- Definition: A futures contract is a legally binding agreement to buy or sell a specific asset (like a commodity, currency, or stock index) at a predetermined price on a future date.
- Purpose: Primarily used for hedging against price fluctuations and speculation.
- Example: A farmer may enter into a futures contract to sell wheat at a fixed price to protect themselves against potential price declines.

### 2. Options Contracts

- Definition: Options contracts give the buyer the right, but not the obligation, to buy or sell
  an underlying asset at a predetermined price (strike price) on or before a specified
  expiration date.
- Types:
  - Call Options: The right to buy an asset.
  - Put Options: The right to sell an asset.
- Purpose: Used for both hedging and speculation. They offer more flexibility than futures contracts.
- Example: An investor might buy a call option on a stock to limit their downside risk if the stock price falls.

### 3. Swaps

- Definition: A swap is an agreement between two parties to exchange cash flows based on different underlying assets or interest rates.
- Types:

- Interest Rate Swaps: Exchange interest rate payments based on different benchmarks.
- Currency Swaps: Exchange principal amounts and interest payments in different currencies.
- Credit Default Swaps (CDS): The buyer pays a premium to the seller, who agrees to pay the buyer if a specific debt instrument defaults.
- Purpose: Used to manage interest rate risk, currency risk, and credit risk.
- Example: A company with a floating-rate loan might enter into an interest rate swap to exchange its floating rate payments for a fixed rate.

# **Key Participants in the Derivatives Market**

- **Hedge Funds:** These investment funds often use derivatives to manage risk and generate returns.
- **Investment Banks:** They provide brokerage, advisory, and trading services in the derivatives market.
- **Commercial Banks:** They use derivatives to manage their own risk and offer derivative products to their clients.
- **Corporations:** Corporations use derivatives to hedge their exposure to commodity prices, interest rates, and foreign exchange rates.
- **Individuals:** While less common, individuals can also participate in the derivatives market through futures and options contracts.