# **Stock Projection Techniques - Explained**

## 1. CAGR (Compound Annual Growth Rate)

CAGR represents the average annual growth rate of an investment over time. It smooths out returns and shows how a stock has grown as if it had increased at the same rate each year.

### 2. EPS and PE-Based Projection

This technique estimates a stock's future price using forecasted EPS (Earnings Per Share) and a typical Price-to-Earnings (PE) ratio. It reflects a valuation based on company performance.

#### 3. Monte Carlo Simulation

A statistical method where thousands of possible future prices are simulated using historical returns and volatility. Helps understand best/worst/likely outcomes.

### 4. Scenario Analysis

Presents possible future values under different assumptions (pessimistic, average, optimistic). Useful for visualizing the impact of varying growth rates on price.