

Finance Primer

Net present value (NPV) discounts a stream of future cash flows back to today's value using a chosen discount rate, then subtracts the initial investment. A positive NPV indicates the project is expected to create value at the discount rate used.

The Sharpe ratio measures the excess return of a portfolio per unit of total volatility (standard deviation). It is computed as $(R_p - R_f) / \sigma_p$, where R_p is the portfolio return, R_f is the risk-free rate, and σ_p is the portfolio's standard deviation of returns.

Dollar-cost averaging is the practice of investing a fixed amount on a fixed schedule regardless of price. It reduces the impact of market timing on long-term returns but does not, on average, beat lump-sum investing in a rising market.