

4 Beta Management [Future Hedging]

Take opposite position in Index (Nifty or Sensex) to hedge portfolio of Cash market

$$\text{No. of Contracts} = \frac{VP \times (B_T - B_P)}{F \times M} \quad [\text{Normal Rounding off}]$$

5 Commodity future

1 Cost of Carry model of future

$$F = (\text{Spot} + \text{PV of storage cost} - \text{PV of convenience yield}) (1 + r)$$

2. Hedging through future

$$\text{Hedge Ratio} = \frac{\text{S.D. of Spot}}{\text{S.D. of Future}} \times r \text{ between spot \& future}$$

$$\text{Quantity of Hedging} = \text{Portfolio [Quantity]} \times \text{Hedge Ratio}$$

$$\text{Amount of Hedging} = \text{Quantity of Hedging} \times \text{Price}$$