

Financial Risk Management.

Assignment : 1

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Problem 1 :-

To be on the safe side, Mr. Ali will use the process of "Short Hedge". Mr. Ali will sell the treasury bonds for future contracts in order to ~~the~~ hedge the risk.

The treasury bonds will set to about 4 months. As there will be rise in interest rates, the prices of mortgages along with treasury bond will fall. Ali will have his loss on mortgages offset by the price by profit on short hedge of the treasury bonds.

Problem 2:-

$$\begin{aligned} \text{Initial interest rate} &= 8\% \\ \text{1 Year Maturity} &= 1080 \end{aligned}$$

$$\text{PV at } 8\% = \frac{1080}{1.08} = 1000$$

$$= \boxed{1000} \text{ For one year.}$$

$$= \frac{1469.32}{(1.08)^5} = 1000.21$$

$$= \boxed{1000.21} \text{ For five years.}$$

$$\text{a) } \text{PV at } 10\% = \frac{1080}{1.10}$$

$$= \boxed{981.81} \text{ For one year.}$$

$$= \frac{1469.32}{(1.10)^5}$$

$$= \boxed{912.33} \text{ For five years.}$$

$$b) \text{ PV at } 6\% = \frac{1080}{1.06}$$

$$= \boxed{1018.86} \quad 1 \text{ Year.}$$

$$= \frac{1469.32}{(1.06)^5}$$

$$= \boxed{1098.14} \quad 5 \text{ Years.}$$