# 12 You are a risk-averse investor who is considering investing in one of two economies. The expected return and volatility of all stock in both economies is the same. In the first economy, all stock move together—in good time all prices rise together and in bad times they all fall together. In the second economy, stock returns are independent-one stock increasing in price has no effect on the prices of the other stocks. Which economy would you choose to invest in?

Explain, report on your conclusions, and include examples.

#19 Suppose the market portfolio is equally likely to increase by 30% or decrease by 10%.

1. Calculate the beta of a firm that goes up on average by 43% when the market goes up, and goes down by 17% when the market goes down.
2. Calculate the beta of a firm that goes up on average by 18% when then market goes down, and goes down by 22% when the market goes up.
3. Calculate the beta of a firm that is expected to go up by 4% independently of the market.

#20 Suppose the risk free interest rate is 4%

1. i. Use the beta you calculated for the stock in Problem 19 (a) to estimate its expected return.

ii How does this compare with the stock’s actual expected return?

1. i. Use the beta you calculated for the stock in Problem 19 (b) to estimate its expected return

ii. How does this compare with the stocks actual expected return.