



Short selling

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Calculation

Profit or loss = $\frac{\text{proceeds from sale of shares}}{\text{sale of shares}} - \frac{\text{commission on sale of shares}}{\text{sale of shares}} - \frac{\text{dividends on shares}}{\text{shares}} - \frac{\text{cost of buying shares}}{\text{shares}} - \frac{\text{commission on purchase of shares}}{\text{purchase of shares}}$

Problems

1. Suppose you decide that the Bear Company stock is selling at too high a price at its current \$50 per share price. You are convinced that the price of Bear stock will fall in the next couple of months, so you decide to sell 100 shares of Bear stock short. Ignoring transactions costs, if the Bear Company does not pay dividends and if you do not have to use a margin account, what is your profit or loss if the stock's price goes to
 - a. \$40 and you buy at that price to cover your short?
 - b. \$55 and you buy at that price to cover your short?
2. You are very sure that the stock of the Dippy Company will drop from its present price of \$40. You decide to sell 100 shares of Dippy Company stock short. Now suppose that you must pay your broker 1% in transactions costs for all purchases and sales. If Dippy Company pays a dividend of \$1 per share, what is your profit or loss if you buy the stock back at:
 - a. \$35?
 - b. \$40?
 - c. \$45?
3. You are very sure that the stock of the Goofy Company will drop from its present price of \$100. You decide to sell 100 shares of Goofy Company stock short. Now suppose that you must pay your broker 0.5% in transactions costs for all purchases and sales. If Goofy Company pays no dividends, what is your profit or loss if you buy the stock back at:
 - a. \$50?
 - b. \$150?
 - c. \$100?

Solutions

Hint: You make a profit in a short sale transaction only when the price of the stock declines by more than the amount of any commissions and any dividends.

1.
 - a. A profit: $\$5,000 - 4,000 = \mathbf{\$1,000}$
 - b. A loss: $\$5,000 - 5,500 = \mathbf{-\$500}$
2.
 - a. $\$4,000 - 40 - 100 - 3,500 - 35 = \mathbf{\$325}$
 - b. $\$4,000 - 40 - 100 - 4,000 - 40 = \mathbf{-\$180}$
 - c. $\$4,000 - 40 - 100 - 4,500 - 45 = \mathbf{-\$685}$
3.
 - a. $\$10,000 - 50 - 5,000 - 25 = \mathbf{\$4,925}$
 - b. $\$10,000 - 50 - 15,000 - 75 = \mathbf{-\$5,125}$
 - c. $\$10,000 - 50 - 10,000 - 50 = \mathbf{-\$100}$