

## Session 20D: Post class test solutions

1. **c. 2.00.** To get the value, you divide the average unlevered beta across the sector by the correlation coefficient:
  - Correlation coefficient = Square root of  $R^2 = 0.36^{.5} = 0.6$
  - Total beta =  $1.20/0.6 = 2.00$
2. **b. 33.33%.** First, estimate the market values of debt and equity:
  - Market value of equity =  $600 * 3 = 1800$
  - Market value of debt = 600
  - D/E ratio =  $600/1800 = 33.33\%$
3. **b. \$410,000.** Subtract the after-tax salary expense from the after-tax operating income:
  - After-tax operating income = 500,000
  - Adjusted after-tax operating income =  $500,000 - 150,000 (1-.4) = 410,000$
4. **c. Abel Stores has more revenues than the typical companies that you value.** None of the other stated reasons would affect the illiquidity discount that you would attach to the company.
5. **c. Both.** Both would serve to reduce the fear of lost business and reduce the key person discount.