

Session 20: Post Class tests

1. You are valuing Solarco Inc., a green energy company, for an initial public offering. You believe that there is a significant risk that the company will not survive the first decade of operations. In doing a discounted cash flow valuation of the company, which of the following would you do to reflect your concern about the risk of failure?
 - a. Use a total beta and estimate a higher cost of equity
 - b. Add a premium to your normal risk-adjusted discount rate (based, for instance on a market beta) to arrive a high target discount rate
 - c. Use a high cost of debt, to reflect default risk, in your cost of capital
 - d. Use a normal risk-adjusted discount rate to arrive at a value and then adjust that value for the probability of failure
 - e. None of the above
2. Now assume that you have arrived at a value of \$ 1 billion for Solarco, based upon the expected cash flows and after adjusting for the probability of failure. The company is planning to have 100 million shares outstanding but will issue only 20 million of these shares at \$8/share on the initial offering date. If half the proceeds from the offering will be paid out to the founders of the company and the other half retained in the company, what would you expect the fair value per share to be after the offering?
 - a. \$8.00/share
 - b. \$8.80/share
 - c. \$9.20/share
 - d. \$10.00/share
 - e. \$10.80/share
 - f. \$11.60/share
3. There is evidence that initial public offerings are systematically “under priced” by 15% for their initial public offerings. Which of the following is a good explanation of why this under pricing occurs? (You can pick more than one)
 - a. IPO companies are riskier than the average publicly traded company
 - b. There is less historical data available on IPO companies, making it more difficult to estimate valuation inputs
 - c. Investment bankers guarantee the “offering price” and have to buy the shares if they are over priced
 - d. IPO companies generally offer only a small proportion of their outstanding offering to the public in the initial offering.
 - e. Investment bankers earn higher fees if they under price an offering
 - f. Investors will not buy an IPO, if it is fairly priced.
4. Assume that having reviewed the evidence on initial public offerings, and finding that the average IPO is under priced by 15%, you decide to start an active investment fund aimed at investing just in IPOs. If you bid for 10,000 shares in

every IPO that hits the market, which of the following would you expect to see as your return on your fund?

- a. <15%
- b. Roughly 15%
- c. > 15%

Explain why.

5. You are analyzing a small, privately owned business software company that is currently fully owned by its founders, who have all their wealth tied up in the company. You have estimated a total beta of 3.00 for the company, based upon your estimate of an average R-squared of 16% of business software companies with the market. You have been approached by a venture capitalist who specializes in technology companies who is interested in investing in the company. If the R-squared between the VC's portfolio and the market is 64%, what beta would you use in computing the value of the business to the VC?
- a. 0.75
 - b. 1.20
 - c. 1.50
 - d. 1.875
 - e. 3.00