Session 12: Post Class tests

1. You have just completed a discounted cash flow valuation of Rallye Inc., a publicly traded company, and have estimated a value of $500 million for the equity in the company. The company has 100 million shares trading at $5 a share, and 25 million employee options with an exercise price of $5/share. Estimate the value of equity per share using
   a. The fully diluted share approach
   b. The treasury stock approach
   Explain the difference.

2. Now, assume that you decide to value the employee options in Rallye Inc., using an option-pricing model and arrive at a value of $1.00 for each option. What is the value of equity per share, if you decide to use the “option value” approach?
   a. $5/share
   b. $4.75/share
   c. $3.80/share
   d. $4.20/share
   e. None of the above

3. Assume that Zisco Inc., a technology company, has 200 million shares outstanding, trading at $8/share. The company also has 10 million options outstanding, with an exercise price of $4/share and an option value of $7.5/option. What is the total market value of equity in Zisco?
   a. $1.525 billion
   b. $1.56 billion
   c. $1.6 billion
   d. $1.64 billion
   e. $1.675 billion

4. You are considering using a stable-growth, dividend discount model to value a stock. Which of the following companies is the best candidate for the model? (You can assume that they all have growth rates less than that of the economy for the foreseeable future)
   a. Dividends = FCFE, Beta = 0.90, Payout ratio = 80%
   b. Dividends = FCFE, Beta = 1.80, Payout ratio = 80%
   c. Dividends = FCFE, Beta = 0.90, Payout ratio = 20%
   d. Dividends = FCFE, Beta = 1.80, Payout ratio = 20%

5. Now, assume that you are using a two-stage dividend discount model to value a bank, which is expected to generate a return on equity of 12% in perpetuity. The firm pays 20% of its earnings as dividends during its high growth phase, and expects its growth rate to drop to 3% in perpetuity after year 5. Estimate the expected growth rate for the next 5 years and the payout ratio after year 5.
   a. Expected growth next 5 years = 2.4%, Payout ratio after year 5 = 20%
   b. Expected growth next 5 years = 2.4%, Payout ratio after year 5 = 75%
   c. Expected growth next 5 years = 9.6%, Payout ratio after year 5 = 20%
   d. Expected growth next 5 years = 9.6%, Payout ratio after year 5 = 75%
   e. Expected growth next 5 years = 12%, Payout ratio after year 5 = 20%
6. Assume that you have used a stable growth dividend discount model to value Zipp Inc., a publicly traded company. With an expected growth of 2% in perpetuity, a cost of equity of 10%, a payout ratio of 90% and expected earnings next year of $2/share, you have arrived at a value per share of $22.50/share. The stock is currently trading at $18.75/share. Assuming that the market shares your assumptions about the growth rate, cost of equity and earnings per share, what is the return on equity that the market is imputing in the current stock price.

a. 8%
b. 10%
c. 12.5%
d. 20.0%
e. None of the above