Session 28: Post Class tests

1. If you set your dividend payout ratio by looking at the average for the sector in which you operate, which of the following assumptions are you making?
   a. That your growth is close to the overall growth rate for the sector
   b. That all firms in the sector face similar operating risk
   c. That all firms in the sector have similar debt ratios
   d. That all firms in the sector have similar dividend clienteles
   e. All of the above.

2. You are comparing the dividend payout ratios across banks, with large variances in expected growth, size and regulatory capital ratios. Which of the following types of banks would you expect to have the lowest dividend payout ratios?
   a. Small, high growth banks with high regulatory capital ratios
   b. Large, low growth banks with high regulatory capital ratios
   c. Small, high growth banks with low regulatory capital ratios
   d. Large, low growth banks with low regulatory capital ratios

3. Assume that you are comparing the dividend payout ratios of computer software companies and have run a regression of payout ratios on expected growth in earnings per share:
   Dividend Payout ratio = 0.60 – 1.5 (Expected growth rate)
   (Thus, with an expected growth rate of 20%, your expected payout ratio would be 30% = .6-1.5(.2) = .3)
   If a company pays no dividends, how high would its growth rate need to be to justify this policy?
   a. 0%
   b. 20%
   c. 40%
   d. 80%
   e. None of the above

4. You have run a regression of payout ratios against expected growth and risk (beta) for all companies in the market and arrived at the following equation:
   Payout ratio = 0.80 - 1.2 (Expected growth) - .25 (Beta)
   Using this regression, estimate the payout ratio for a firm with an expected growth rate of 20% and a beta of 1.2.
   a. 0%
   b. 26%
   c. 50%
   d. 56%
   e. 80%
Session 28: Post class test solutions

1. **e. All of the above.** It is only if growth, risk (operating and financial) and investor bases are similar that payout ratios should be similar as well.

2. **c. Small, high growth banks with low regulatory capital ratios.** These banks will need to invest more in regulatory capital both because they are growing and because they are under capitalized. That will result in less cash available for payout.

3. **c. 40%.** To get an expected payout ratio of 0%
   
   $0 = .60 \cdot d \cdot 1.5 \cdot (X)$
   
   $X = .40$

4. **b. 26%.** Payout ratio = $0.80 - 1.2 (.20) - .25 (1.2) = 0.26$