

Session 15: Post Class test

1. There are variations on PE ratio, based upon whether you use earnings per share from the most recent fiscal year, the last 12 months (trailing) or expected earnings per share in the next 12 months (forward). In periods of economic health and earnings growth, which of the measures of PE will yield the lowest value?
 - a. Most recent fiscal year
 - b. Trailing 12 months
 - c. Next 12 months
2. Allwyn Inc. is a stable growth, dividend-paying firm that is expected to pay out 60% of its expected earnings per share of \$1.50 next year as dividends. If the earnings are expected to grow 3% a year in perpetuity and the cost of equity is 9%, what PE ratio would you expect the firm to have?
 - a. 6.00
 - b. 9.00
 - c. 10.00
 - d. 20.00
 - e. None of the above
3. If you are looking for a cheap stock on a PE ratio basis, which of the following combinations is the best one for you?
 - a. Low PE, high growth, high risk, high payout
 - b. Low PE, high growth, low risk, high payout
 - c. Low PE, high growth, low risk, low payout
 - d. Low PE, high growth, high risk, low payout
 - e. Low PE, low growth, low risk, high payout
4. You are comparing the PE ratios for pharmaceutical firms and have chosen to run a regression of PE ratios against expected growth rates at these companies:
 $PE = 4.0 + 80 (\text{Expected growth rate in EPS})$
(Thus, if your expected growth rate is 10%, your $PE = 4.0 + 80 (.10) = 12$)
Assume that you are looking at a company that is trading at a PE ratio of 16 and has an expected growth rate of 20%. Given the regression, which of the following conclusions would you draw?
 - a. The stock is overvalued by 20%
 - b. The stock is under valued by 20%
 - c. The stock is over valued by 25%
 - d. The stock is under valued by 25%
 - e. The stock is correctly valued
5. The conventional wisdom is that if a company increases its growth rate, the PE ratio should go up. When is this not true?
 - a. When the company has a growth rate < riskfree rate
 - b. When the company is risky
 - c. Whey the company is safe
 - d. When the company earns a $ROE > \text{Cost of equity}$
 - e. When the company earns a $ROE < \text{Cost of equity}$

Session 15: Post class test solutions

1. **c. Next 12 months**
2. **c. 10.** $PE = 0.60 / (.09 - .03) = 10$
3. **b. Low PE, high growth, low risk, high payout.** This company offers the best of all worlds. It is cheap, has high growth, low risk and high quality earnings (enabling it to pay out lots in dividends while growing).
4. **b. Under valued by 20%.**
Predicted PE, given growth = $4 + 80 (.20) = 20$
Actual PE = 16
Under valuation = $16/20 - 1 = -20\%$ (Actual is less than predicted)
5. **e. When the company earns a ROE < Cost of equity.** A company that increases growth by investing in projects that earn less than the cost of equity will destroy value and see its PE ratio go down. In terms of mechanics, the gain in growth will be offset by the loss in cash flows to equity (or dividends) in the near term.