Session 22: Post Class tests

1. Assume that you have found Galloway Inc. is under levered, with an actual debt ratio of 10% and an optimal debt ratio of 40%. Galloway is a mid-cap company that pays substantial dividends. It generated a ROC of 15% in the most recent year, higher than its cost of capital of 9%. The stock has also generated a Jensen’s alpha of 8% and has relatively high insider holdings (as a percent of the outstanding stock). Which of the following would you recommend that the company do?
   a. Borrow money immediately and buy back stock
   b. Borrow money immediately and pay dividends
   c. Borrow money gradually over time and pay higher dividends
   d. Borrow money gradually over time and take projects
   e. Borrow money gradually and buy back stock

2. Alexis Inc. is an under levered public company, with two classes of shares. Since the insiders (who run the company) own the voting shares, the company has the luxury of increasing its debt ratio gradually over time. Which of the following actions will hurt the company in this endeavor?
   a. Taking new investments predominantly with debt
   b. Buying back stock
   c. Increasing dividends per share
   d. Cutting dividends per share

3. Norwell Inc. has equity with a market value of $900 million and a current debt to capital ratio of 10%. If Norwell has an optimal debt ratio of 40% and would like to borrow money and buy back stock right now, how much additional debt will the firm have to issue?
   a. $260 million
   b. $300 million
   c. $400 million
   d. $600 million
   e. None of the above

4. Loze Inc. is a company that has $800 million in debt outstanding and a market capitalization of $200 million. The company is having trouble making its interest payments and is considering selling a division (with an estimated value of $400 million) and using the proceeds from the sale to retire debt. Assuming that it can sell the division for fair value, what will the debt ratio be for Loze after this transaction?
   a. 20%
   b. 40%
   c. 67%
   d. 80%
   e. None of the above

5. Revere Stemware is a company that a market capitalization of $400 million and debt outstanding of $600 million. The company believes that its optimal debt to capital ratio is 25% but is not under any immediate bankruptcy threat. The firm has good investment opportunities and expects its value (as a business) to
double over the next 5 years. How much debt will it have to repay to get to its optimal debt ratio?

a. Zero
b. $100 million
c. $350 million
d. $400 million
e. None of the above
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1. **d. Borrow money gradually over time and take projects.** The company is not under immediate threat of takeover (Positive Jensen’s alpha, Higher insider holdings) and has good projects. It can take its time borrowing and should take projects with the cash.

2. **d. Cutting dividends per share.** If you cut dividends per share, equity will increase (both in market and book value terms) which undercuts the objective of raising the debt ratio.

3. **b. $300 million.** The overall firm value is $1 billion, which is the sum of the market value of equity and debt. A 40% ratio will yield a market value of $400 million for the debt. Since the firm already owes $100 million, it will have to issue an additional $300 million.

4. **c. 67%.** After the division is sold and the proceeds used to pay down debt, the value of the firm will drop to $600 million. The debt outstanding of $400 million will yield a debt ratio of 66.67% (400/600).

5. **b. $100 million.** The existing value of the business is $1 billion, the sum of debt plus equity. The value of the business in five years will be $2 billion (double the existing value of $1 billion). The debt has to be $500 million at the end of year 5 to deliver a debt to capital ratio of 25%. The firm will have to therefore repay $100 million in debt.