

Session 19: Post Class tests

1. Simac Inc. is a publicly traded company and its current cost of capital is 9%. You have computed the optimal debt ratio for the firm to be 40% and the cost of capital at the optimal is 8%. If the firm is mature (with expected free cash flows growing 2% a year in perpetuity), how much will Simac's firm value increase by, on a percentage basis, if it moves to its optimal?
 - a. 11.1%
 - b. 12.5%
 - c. 16.67%
 - d. 25%
 - e. None of the above
2. Assume that Lyric Inc., a publicly traded company, has 10 million shares, trading at \$20/share and that it has \$50 million in debt. You believe that the value of Lyric will increase by 10% if it borrows \$50 million and buys back stock. Assuming investors are rational, what would you expect to pay, per share, on the stock buyback?
 - a. \$20/share
 - b. \$21.875/share
 - c. \$22.50/share
 - d. \$23.33/share
 - e. \$25/share
 - f. None of the above
3. In the last example, assume that you plan to buy the shares back at \$25/share. If you do so, what would you expect the remaining shares in the company to trade at, after the buy back?
 - a. \$20/share
 - b. \$21.88/share
 - c. \$22.50/share
 - d. \$23.33/share
 - e. \$25/share
 - f. None of the above
4. When computing the optimal debt ratio for a firm in the standard cost of capital approach, we keep operating income fixed while varying the cost of capital, thus ignoring the effect of increased default risk on operations. One way of incorporating this "indirect" bankruptcy cost into your analysis is to assume that operating income will decrease as a company's bond rating drops. If you allow for this effect, which of the following would you expect to generally see happen to the optimal debt ratio?
 - a. The optimal debt ratio will go down
 - b. The optimal debt ratio will remain unchanged
 - c. The optimal debt ratio will go up
 - d. Any of the above
5. You are assessing the optimal debt ratio for an oil company, using the cost of capital approach. A key driver of this optimal debt ratio is the operating income that you attribute to this firm. In coming up with an optimal, which of the

following measures of operating income will yield the “best” estimate of optimal debt ratio?

- a. Operating income in the most recent fiscal year
- b. Operating income in the most recent 12 months
- c. Highest operating income earned over an oil price cycle
- d. Lowest operating income earnings over an oil price cycle
- e. Average operating income earned over an oil price cycle