

Quiz: 3/19/12

Name & Time Key

Quiz: Assume the corporate tax rate is 30%, the personal tax rate on interest income is 25% and the personal tax rate on equity income is 20%. Determine the optimal capital structure for Android Corporation if the firm has a 45% chance of having an annual EBIT of \$1,000,000 and a 55% of having an annual EBIT of \$3,000,000. What is Android's optimal level of interest payments?

Note: You will need to do enough calculations to show that your answer is optimal.

Note: Bonus WSJ Questions on back of page

+6 ~~10~~  $T^* = 1 - \frac{1-3 \text{ (not of interest labeled)}}{(1-(.55)(.3)) (1-.2)} = + 0.1093$  ~~24~~ (22)

+6 ~~10~~  $T^* = 1 - \frac{3+ \text{ (not of interest labeled)}}{(1-0)(1-.2)} = -0.067$  ~~24~~ (22)

$= \frac{.2-.25}{1-.25} =$

+6  $\Rightarrow$  optimal interest = 3 million