

Quiz: 3/19/12

Name & Time Kun

Quiz: Assume the corporate tax rate is 40%, the personal tax rate on interest income is 20% and the personal tax rate on equity income is 10%. Determine the optimal capital structure for Robot Corporation if the firm has a 70% chance of having an annual EBIT of \$4,000,000 and a 30% of having an annual EBIT of \$5,000,000.

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

Note: Bonus WSJ Questions on back of page

$\textcircled{2}$ not of income labeled

$$\frac{4-5}{1-0.4} \left(T^* = 1 - \frac{(1-0.3)(0.4)(1-0.1)}{(1-0.2)} \right) = 7.01 \textcircled{22}$$

$\textcircled{2}$ not of income labeled

$$\frac{5+}{1-0.4} \left(T^* = 1 - \frac{(1-0)(1-0.1)}{(1-0.2)} \right) = -0.125 \textcircled{22}$$
$$= \frac{0.1-0.2}{1-0.2} =$$

\Rightarrow optimal interest = 5 million