94:00

Quiz B for 2:30 Class: 10/15/12 Name ___Key___

Assume that after the next election that Congress and the President work together to raise tax rates. They lower the corporate tax rate to 45%, the tax rate on interest income to 35%, and the tax rate on dividends and capital gains to 30%. What is Lucky Colts optimal level of interest payments if there is a 10% chance that their annual EBIT will equal $50 million per year, a 70% chance that their annual EBIT will equal $25 million per year, and a 20% chance that their EBIT will equal $10 million per year?

Note: You will need to show enough of your calculations (show your work, not just your answers) to show that your answer is optimal.

Wall Street Journal Questions are on the back of this page.

+3 $10-25 million

+7 $$\left(T^* = 1 - \frac{(1-(.8)(.45))(1-.3)}{(1-.35)} = 0.311 \right.$$

+3 $25-50 million

+7 $$\left(T^* = 1 - \frac{(1-(.1)(.45))(1-.3)}{(1-.35)} = -0.028 \right.$$

+7 ⇒ optimal interest = $25 million