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Assume that New Aquatics Inc's EBIT has a $20 \%$ chance of equaling \$1,000,000, a $50 \%$ chance of equaling $\$ 6,000,000$, and a $30 \%$ chance of equaling $\$ 9,000,000$. Assume also that New Aquatic’s tax rate equals $35 \%$, that the tax rate on equity income equals $20 \%$, and that the tax rate on interest income equals 30\%.
a. Considering only tax issues, determine the optimal level of interest expense for New Aquatics? (Note: Calculations required).
b. Assume New Aquatics issues debt beyond the level of debt you identified as optimal in part "a". Assume also that New Aquatic's stock price rose when the firm issued the additional debt. How would you explain this reaction?

