

Sheet1

<b>Problem 1</b>					
Bond Rating =	BBB				
Interest Rate =	9.00%				
After-tax Cost of Debt =	5.40%				
Unlevered Beta = $1.06 / (1 + (1 - 0.4) \cdot (.1111)) =$				0.99375621	
Beta at 25% D/E Ratio = $0.99(1 + 0.6 \cdot (.25)) =$				1.14281964	
Cost of Equity = $7\% + 1.14 (5.5\%) =$			13.27%		
Cost of Capital = $5.40\% (.2) + 13.27\% (.8) =$				11.70%	
<b>Problem 2</b>					
Change in Firm Value = $(250 + 50) (.11 - .10)(1.05) / (.10 - .05) =$					63
Change in stock price = $63 / 10 = \$ 6.30$ (\$10.50 if you assume buyback at current price)					