MANAGEMENT OPTIONS: SEEING THROUGH THE CONFUSION!

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Problem 1

You have been asked to review the valuation of shares in Martini Inc., an alcoholic beverage maker in stable growth.

- The analyst has estimated an intrinsic value per share of \$8 per share but he obtained that number by dividing the total value of equity by the fully diluted number of shares (including options outstanding).
- If the company has 100 million shares outstanding and 25 million options that have an <u>exercise price of \$6 per</u> <u>share</u> and a value per option of \$4, estimate the correct value of equity per share in the company. (2 points)

Problem 1: Solution

Estimated value of equity =	\$	1,000.00		
- Value of options	\$	100.00		
Value of equity in common stock	\$	900.00		
# Common shares outstanding			100.00	
Value per share	\$	9.00		
I don't like the treasury stock approach, but I gave full credit if you used it.				
Estimated value of equity	\$	1,000.00		
+ Exercise proceeds of option	\$	150.00		
Total equity value	\$	1,150.00		
Fully Diluted shares			125.00	
Value per share	\$	9.20		

Problem 2

Litfast Technology is a small software company that has 100 million shares trading at \$9/share, \$300 million in debt outstanding and \$100 million in cash & marketable securities. The company also has 20 million options that you have valued at \$5/option; you used an option pricing model to arrive at this estimate. Assuming that the company's shares and options are fairly valued, that it has a cost of capital of 10%, a return on capital of 20% and an expected growth rate of 2% in perpetuity, estimate the expected after-tax operating income next year.

Problem 3: Solution

Let the intrinsic value of the operating assets be X	
Value of Operating assets	X
+ Cash	100
Value of firm	1300
- Debt	300
Value of equity	1000
- Value of options	100
Value of shares traded	900
Solving for X	
Value of operating assets	1200
1200 = After-tax OI (1- 2%/20%) / (.1002)	
Solving for After-tax OI	\$106.67