

## Practice Problems

Below are a couple practice problems. Use them to review the MM propositions and related calculations.

### Practice Problem 16.1:

Consider the following information for an unlevered firm U:

*EBIT = \$ 1,600 annually*

*Unlevered value  $V_U = \$4,000$*

*Tax rate = 34%*

*Cost of debt = 10%*

A levered firm L in the same business risk class has a debt-to-equity ratio of 1. Use the MM propositions to determine:

- a. The after tax cost of equity for firms U and L.
- b. The after tax WACC for both firms.

### Practice Problem 16.2:

Firm U is an unlevered firm with \$2.5 million of EBIT, tax rate 34%, and a 10% required return on equity. In the Modigliani Miller framework:

- a. What is the market value of the unlevered firm U?
- b. Suppose firm U is levered with \$12 million of 7% bonds. What is the market value of the resulting levered firm L?
- c. Suppose there are two firms, A and B. that are identical in all respects to the unlevered firm U and levered firm L, respectively. Explain what will happen if the market value of A is \$ 12,000,000 and the market value of B is \$22,000,000.
- d. **Construct the Capital Structure Arbitrage to reap the riskless profits resulted from the misvaluation of Firms A and B.** Show clearly that your construction satisfies the two conditions for a successful Capital Structure Arbitrage!

Have a question about practice problems? Post your question on the designated forum. Classmates are encouraged to respond.