The Weighted Average Cost of Capital Method

**4.**

Suppose Goodyear Tire and Rubber Company is considering divesting one of its manufacturing plants. The plant is expected to generate free cash flows of $1.5 million per year, growing at a rate of 2.5% per year. Goodyear has an equity cost of capital of 8.5%, a debt cost of capital of 7%, a marginal corporate tax rate of 35%, and a debt-equity ratio of 2.6. If the plant has average risk and Goodyear plans to maintain a constant debt-equity ratio, what after-tax amount must it receive for the plant for the divestiture to be profitable?

**5.**

Suppose Alcatel-Lucent has an equity cost of capital of 10%, market capitalization of $10.8 billion, and an enterprise value of $14.4 billion. Suppose Alcatel-Lucent’s debt cost of capital is 6.1% and its marginal tax rate is 35%.

* a. What is Alcatel-Lucent’s WACC?
* b. If Alcatel-Lucent maintains a constant debt-equity ratio, what is the value of a project with average risk and the following expected free cash flows?

| **Year** |  **0** | **1** | **2** | **3** |
| --- | --- | --- | --- | --- |
| FCF | −100 | 50 | 100 | 70 |

* c. If Alcatel-Lucent maintains its debt-equity ratio, what is the debt capacity of the project in part b?