

## Practice Questions - Valuation

- 1. Proust Company has FCFF of \$1.7 billion and FCFE of \$1.3 billion. Proust's WACC is 11 percent, and its required rate of return for equity is 13 percent. FCFF is expected to grow forever at 7 percent, and FCFE is expected to grow forever at 7.5 percent. Proust has debt outstanding of \$ 15 billion.
  - A. What is the total value of Proust's equity using the FCFF valuation approach?
  - B. What is the total value of Proust's equity using the FCFE valuation approach?
- 2. Quinton Johnston is evaluating TMI Manufacturing Company, Ltd., which is headquartered in Taiwan. In 2008, when Johnston is performing his analysis, the company is unprofitable. Furthermore, TMI pays no dividends on its common shares. Johnston decides to value TMI Manufacturing by using his forecasts of FCFE. Johnston gathers the following facts and assumptions:
  - The company has 17.0 billion shares outstanding.
  - Sales will be \$ 5.5 billion in 2009, increasing at 28 percent annually for the next four years (through 2013).
  - Net income will be 32 percent of sales.
  - Investment in fixed assets will be 35 percent of sales; investment in working capital will be 6 percent of sales; depreciation will be 9 percent of sales.
  - 20 percent of the investment in assets will be financed with debt.
  - Interest expenses will be only 2 percent of sales.
  - The tax rate will be 10 percent. TMI Manufacturing's beta is 2.1; the risk free government bond rate is 6.4 percent; the equity risk premium is 5.0 percent.
  - At the end of 2013, Johnston projects TMI will sell for 18 times earnings.

## What is the value of one ordinary share of TMI Manufacturing Company?

- **3.** Watson Dunn is planning to value BCC Corporation, a provider of a variety of industrial metals and minerals. Dunn uses a single stage FCFF approach. The financial information Dunn has assembled for his valuation is as follows:
  - The company has 1,852 million shares outstanding
  - The market value of its debt is \$3.192 billion
  - The FCFF is currently \$1.1559 billion
  - The equity beta is 0.90; the equity risk premium is 5.5 percent; the risk free rate is 5.5 percent.
  - The before tax cost of debt is 7.0 percent.
  - The tax rate is 40 percent.
  - To calculate WACC, he will assume the company is financed 25 percent with debt.
  - The FCFF growth rate is 4 percent.

Using Dunn's information, calculate the following:

## A. WACC

- B. Value of the firm
- C. Total market value of equity. D. Value per share