## **Valuation: Measuring and Managing the Value of Companies**

## Analyzing Performance and Competitive Position Chapter 8 Problems

- 1. JetCo is a manufacturer of high speed aircraft. The company generates \$100 million in operating profit on \$600 million of revenue and \$800 million of invested capital. JetCo's primary competitor Gulf Aviation also generates \$100 million in NOPLAT. Gulf Aviation is slightly larger; the company recorded \$800 million in revenue. Gulf Aviation has \$600 million in invested capital. Based on the preceding data, which company is creating more value? Assume an operating tax rate of 25 percent and cost of capital of 8 percent.
- 2. Using the industry data presented in Question 1, decompose ROIC into operating margin and capital turnover for each company. Which ratio is more important in determining ROIC, operating margin or capital turnover?
- 3. DefenseCo announces a purchase of Gulf Aviation for \$1.1 billion in cash. Consequently, Gulf Aviation's invested capital with goodwill and acquired intangibles rises from \$600 to \$1.1 billion. Next year, while conducting its annual review of Gulf Aviation, senior management at DefenseCo asks you the following questions: Based on the profitability figures presented in Question 1, is Gulf Aviation creating value for DefenseCo? Which company, JetCo or Gulf Aviation, has the best financial performance in the industry?
- 4. Gulf Aviation generates \$800 million per year, with no material growth. The consolidated revenues for DefenseCo are \$1.5 billion in Year 1, \$1.8 billion in Year 2 (the year of the acquisition), and \$2.5 billion in Year 3. If DefenseCo closed the acquisition of Gulf Aviation on October 1 of Year 2, what is the "apples-to-apples" organic growth for Defense Co in Year 2 and Year 3? How does this differ from reported revenues? Assume Gulf Aviation revenues are consolidated into DefenseCo only after the acquisition close and that the fiscal year closes for both companies on December 31 of each year.
- 5. Using an Internet search tool, find Procter & Gamble's investor relations website. Under "Financial Reporting," you will find the company's 2009 annual report. In the annual report's section titled "Management's Discussion and Analysis," you will find a discussion on revenue

growth. How fast did the company grow (or shrink) revenues in 2009? How much is attributable to price, number of units sold, foreign currencies, and shift in the mix of products sold? How does this compare to 2008 (which can also be found in the 2009 annual report)? What would the growth have been on a "constant currency basis?" Is the difference with and without currency meaningful?

6. Which interest coverage ratio, EBITDA to interest or EBITA to interest, will lead to a higher number? When is the EBITDA interest ratio more appropriate than EBITA ratio? When is the EBITA interest coverage ratio more appropriate than the EBITDA ratio?