

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

### **Forecasting Performance**

#### **Chapter 9 Problems**

1. 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 2009, the company reported \$8.6 billion in "ACCRUED AND OTHER LIABILITIES" and \$79.0 billion in revenue, such that accrued and other liabilities equaled 10.9 percent of revenue. Using data provided in Note 3 of the annual report, discuss why a forecast ratio of 10.9 percent going forward would distort your forecast of free cash flow. How should the balance sheet be reorganized to prevent this?
2. Exhibit 9.14 presents the income statement and balance sheet for PartsCo, a \$900 million supplier of machinery parts. Next year, the company is expected to grow revenues by 15 percent to \$945 million. Using the methodology outlined in Exhibit 9.3, forecast next year's income statement for PartsCo. Assume next year's forecast ratios are identical to this year's forecast ratios. Forecast depreciation as a percentage of last year's property and equipment. Forecast interest as a percentage of last year's total debt.
3. Using the methodology outlined in Exhibit 9.10, forecast the operating items on next year's balance sheet for PartsCo. Forecast each balance sheet item as a function of revenue, except inventory and accounts payable, which should be forecast as a function of cost of sales. Your forecast should be consistent with the revenue and cost of sales forecast in Question 2.
4. Using the methodology outlined in Exhibit 9.12, forecast the financing items on next year's balance sheet for PartsCo. Assume long-term debt remains at \$260 million, no equity is raised, and no dividends are paid. Use short-term debt as the funding plug to balance the balance sheet. Your forecast should be consistent with forecasts in Questions 2 and 3.
5. The chief financial officer of PartsCo has asked you to rerun the forecast of the company's income statement and balance sheet at a growth rate of 5 percent. If the company generates more cash than it needs, how can the balance sheet be adjusted to handle this? What alternatives exist to handle new cash?

6. The Federal Reserve Bank of St. Louis provides extensive interest rate and economic data. Using an Internet search tool, find the website: “St. Louis Fed: Economic Data – FRED.” In the FRED database’s search box, type “FII10.” This number is the Series ID for the 10-Year Treasury Inflation-Indexed Security. Using FRED data, determine the yield-to-maturity as of January 1, 2010. Next, type “GS10” in the database search box, which is the Series ID for a comparable 10-Year Treasury. What is the yield-to-maturity for the 10-year Treasury bond as of January 1, 2010? What is the inflation rate implied by the two bonds?

**EXHIBIT 9.14 PartsCo: Consolidated Financial Statements**

\$ million

	Prior Year	Current Year		Prior Year	Current Year
<b>Income statement</b>			<b>Balance sheet</b>		
Revenues	782.6	900.0	Working cash	15.0	12.3
Cost of sales	(508.7)	(612.0)	Accounts receivable	85.8	111.0
Selling costs	(156.5)	(171.0)	Inventory	69.7	75.5
Depreciation	(27.0)	(31.3)	Current assets	170.5	198.8
Operating profits	90.4	85.7			
			Property and equipment, net	626.1	720.0
Interest	(5.0)	(7.5)	Total assets	796.6	994.3
Earnings before taxes (EBT)	85.4	78.2			
			<b>Liabilities and equity</b>		
Taxes	(31.1)	(30.8)	Accounts payable	33.7	44.1
Net Income	54.3	47.4	Short-term debt	0.0	4.9
			Current liabilities	33.7	49.0
			Short-term debt	170.0	260.0
			Shareholders' equity	592.9	640.3
			Liabilities and equity	796.6	949.3