

Homework and Suggested Example Problems **Investment Valuation – Damodaran**

Lecture 1 – Introduction to Valuation

Lecture 1 is an introduction to valuation. This lecture is intended to give you an overview of alternative valuation models. We will discuss the properties as well as the advantages and disadvantages of three alternative valuation frameworks: discounted cash flow analysis, relative valuation, and contingent claim valuation. We will also discuss basic accounting statements and financial statement analysis.

In-Class Discussion Problems:

Complete the problems on the attached pages and be prepared to discuss your solutions in class.

Additional Suggested Problems:

The following suggested problems will serve as additional examples related to our class material and should give you a basic idea of the topics that I want to emphasize from the text. The solutions to these problems are available on the class web site.

You may not know the answers to all of the financial statement questions in chapter 3. Use the solutions as a way to review this information. We will discuss specific financial statement items in more detail throughout the semester.

Note: The balance sheet listed for Coca Cola contains an error. The marketable securities listed as 1049 should be listed separately as marketable securities of 159 and inventories of 890.

Chapter	Topic	Suggested Problems
1	Introduction to valuation	None
2	Approaches to valuation	1, 2, 3
3	Financial Statements	1 through 10

In Class Discussion Problems - Lecture 1

1. You are analyzing a company with the expected future cash flows shown below. Based on current market prices, the market value of the firm's equity is \$1,962.9. The outstanding debt has both a market and book value of \$800. The firm's cost of equity (k_e) is 11.0%, the firm's past and future cost of debt is 10%, and the firm's tax rate is $t=50\%$. Use this information to answer the questions below.

<u>Year</u>	<u>CF to Firm</u>	<u>Int Exp (1-t)</u>	<u>CF to Equity</u>
1	\$ 140.0	\$ 40	\$ 100.0
2	\$ 150.0	\$ 40	\$ 110.0
3	\$ 161.0	\$ 40	\$ 121.0
4	\$ 173.1	\$ 40	\$ 133.1
5	\$ 186.4	\$ 40	\$ 146.4
Terminal Value	\$ 3339.6		\$2562.2

- a. Calculate the value of the firm's equity using a discounted cash flow (DCF) model and the listed cash flows to equity.
- b. Calculate the value of the overall firm and the value of the firm's equity using a DCF model and the listed cash flows to the firm.
- c. Are the equity values you obtained using the two methods the same? What firm characteristics would be necessary in order for the two values to be identical?

2. I have attached Nike's financial statements from the most recent fiscal year ending May 31, 2009. The notes to the financial statements and full 10K are available on the class web site. Throughout the course, you will use this information to complete several assignments related to the valuation of Nike.
 - a. Using Nike's financial statements and any additional resources required, calculate the liquidity and leverage ratios we discussed in class. Compare these ratios to those we calculated for Home Depot and note any important similarities and differences between the two firms.
 - b. Using Nike's financial statements and any additional resources required, calculate the efficiency ratios we discussed in class. Compare these ratios to those we calculated for Home Depot and note any important similarities and differences between the two firms.
 - c. Using Nike's financial statements and any additional resources required, calculate the profitability ratios we discussed in class. Compare these ratios to those we calculated for Home Depot and note any important similarities and differences between the two firms.
 - d. Show the decomposition of Return on Capital (ROC) into After-tax Operating Margin and Capital Turnover. Show the decomposition of Return on Equity (ROE) into Net Profit Margin, Asset Turnover, and Financial Leverage. What do these decompositions suggest about the performance of Nike relative to Home Depot's performance, as discussed in class?