

## **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.

#### ***Homework (Turn In):***

Complete the homework problems on the attached pages and turn in your solutions by the assigned due date. Be prepared to discuss your solutions in class.

#### ***Additional Suggested Problems (Do Not Turn In):***

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

## Homework Assignment - 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?

