PART I

LEARNING OBJECTIVES, SUMMARY OVERVIEW, AND PROBLEMS

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CHAPTER 1

EQUITY VALUATION: APPLICATIONS AND PROCESSES

LEARNING OUTCOMES

After completing this chapter, you will be able to do the following:

- define valuation and intrinsic value and explain sources of perceived mispricing;
- explain the going concern assumption and contrast a going concern value to a liquidation value;
- describe definitions of value and justify which definition of value is most relevant to public company valuation;
- describe applications of equity valuation;
- describe questions that should be addressed in conducting an industry and competitive analysis;
- contrast absolute and relative valuation models and describe examples of each type of model;
- describe sum-of-the-parts valuation and conglomerate discounts;
- explain broad criteria for choosing an appropriate approach for valuing a given company.

SUMMARY OVERVIEW

In this reading, we have discussed the scope of equity valuation, outlined the valuation process, introduced valuation concepts and models, discussed the analyst's role and responsibilities in conducting valuation, and described the elements of an effective research report in which analysts communicate their valuation analysis.

- Valuation is the estimation of an asset's value based on variables perceived to be related to future investment returns, or based on comparisons with closely similar assets.

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- The intrinsic value of an asset is its value given a hypothetically complete understanding of the asset's investment characteristics.
- The assumption that the market price of a security can diverge from its intrinsic value—as suggested by the rational efficient markets formulation of efficient market theory—underpins active investing.
- Intrinsic value incorporates the going-concern assumption, that is, the assumption that a company will continue operating for the foreseeable future. In contrast, liquidation value is the company's value if it were dissolved and its assets sold individually.
- Fair value is the price at which an asset (or liability) would change hands if neither buyer nor seller were under compulsion to buy/sell and both were informed about material underlying facts.
- In addition to stock selection by active traders, valuation is also used for:
  - inferring (extracting) market expectations;
  - evaluating corporate events;
  - issuing fairness opinions;
  - evaluating business strategies and models; and
  - appraising private businesses.
- The valuation process has five steps:
  1. Understanding the business.
  2. Forecasting company performance.
  3. Selecting the appropriate valuation model.
  4. Converting forecasts to a valuation.
  5. Applying the analytical results in the form of recommendations and conclusions.
- Understanding the business includes evaluating industry prospects, competitive position, and corporate strategies, all of which contribute to making more accurate forecasts. Understanding the business also involves analysis of financial reports, including evaluating the quality of a company's earnings.
- In forecasting company performance, a top-down forecasting approach moves from macroeconomic forecasts to industry forecasts and then to individual company and asset forecasts. A bottom-up forecasting approach aggregates individual company forecasts to industry forecasts, which in turn may be aggregated to macroeconomic forecasts.
- Selecting the appropriate valuation approach means choosing an approach that is:
  - consistent with the characteristics of the company being valued;
  - appropriate given the availability and quality of the data; and
  - consistent with the analyst's valuation purpose and perspective.
- Two broad categories of valuation models are absolute valuation models and relative valuation models.
  - Absolute valuation models specify an asset's intrinsic value, supplying a point estimate of value that can be compared with market price. Present value models of common stock (also called discounted cash flow models) are the most important type of absolute valuation model.
  - Relative valuation models specify an asset's value relative to the value of another asset. As applied to equity valuation, relative valuation is also known as the method of comparables, which involves comparison of a stock's price multiple to a benchmark price multiple. The benchmark price multiple can be based on a similar stock or on the average price multiple of some group of stocks.
- Two important aspects of converting forecasts to valuation are sensitivity analysis and situational adjustments.
  - Sensitivity analysis is an analysis to determine how changes in an assumed input would affect the outcome of an analysis.

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  - Situational adjustments include control premiums (premiums for a controlling interest in the company), discounts for lack of marketability (discounts reflecting the lack of a public market for the company's shares), and illiquidity discounts (discounts reflecting the lack of a liquid market for the company's shares).
- Applying valuation conclusions depends on the purpose of the valuation.
- In performing valuations, analysts must hold themselves accountable to both standards of competence and standards of conduct.
- An effective research report:
  - contains timely information;
  - is written in clear, incisive language;
  - is objective and well researched, with key assumptions clearly identified;
  - distinguishes clearly between facts and opinions;
  - contains analysis, forecasts, valuation, and a recommendation that are internally consistent;
  - presents sufficient information that the reader can critique the valuation;
  - states the risk factors for an investment in the company; and
  - discloses any potential conflicts of interests faced by the analyst.
- Analysts have an obligation to provide substantive and meaningful content. CFA Institute members have an additional overriding responsibility to adhere to the CFA Institute Code of Ethics and relevant specific Standards of Professional Conduct.

PROBLEMS

1. Critique the statement: "No equity investor needs to understand valuation models because real-time market prices for equities are easy to obtain online."
2. The reading defined intrinsic value as "the value of an asset given a hypothetically complete understanding of the asset's investment characteristics." Discuss why "hypothetically" is included in the definition and the practical implication(s).
3. A. Explain why liquidation value is generally not relevant to estimating intrinsic value for profitable companies.
   B. Explain whether making a going-concern assumption would affect the value placed on a company's inventory.
4. Explain how the procedure for using a valuation model to infer market expectations about a company's future growth differs from using the same model to obtain an independent estimate of value.
5. Example 1, based on a study of Intel Corporation that used a present value model (Cornell 2001), examined what future revenue growth rates were consistent with Intel's stock price of \$61.50 just prior to its earnings announcement, and \$43.31 only five days later. The example states, "Using a conservatively low discount rate, Cornell estimated that Intel's price before the announcement, \$61.50, was consistent with a forecasted growth rate of 20 percent a year for the subsequent 10 years and then 6 percent per year thereafter." Discuss the implications of using a higher discount rate than Cornell did.
6. Discuss how understanding a company's business (the first step in equity valuation) might be useful in performing a sensitivity analysis related to a valuation of the company.

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7. In a research note on the ordinary shares of the Milan Fashion Group (MFG) dated early July 2007 when a recent price was €7.73 and projected annual dividends were €0.05, an analyst stated a target price of €9.20. The research note did not discuss how the target price was obtained or how it should be interpreted. Assume the target price represents the expected price of MFG. What further specific pieces of information would you need to form an opinion on whether MFG was fairly valued, overvalued, or undervalued?
8. You are researching XMI Corporation (XMI). XMI has shown steady earnings per share growth (18 percent a year during the last seven years) and trades at a very high multiple to earnings (its P/E is currently 40 percent above the average P/E for a group of the most comparable stocks). XMI has generally grown through acquisition, by using XMI stock to purchase other companies whose stock traded at lower P/Es. In investigating the financial disclosures of these acquired companies and talking to industry contacts, you conclude that XMI has been forcing the companies it acquires to accelerate the payment of expenses before the acquisition deals are closed. As one example, XMI asks acquired companies to immediately pay all pending accounts payable, whether or not they are due. Subsequent to the acquisition, XMI reinstitutes normal expense payment patterns.
   A. What are the effects of XMI's pre-acquisition expensing policies?
   B. The statement is made that XMI's "P/E is currently 40 percent above the average P/E for a group of the most comparable stocks." What type of valuation model is implicit in that statement?

The following information relates to Questions 9–16

Guardian Capital is a rapidly growing US investment firm. The Guardian Capital research team is responsible for identifying undervalued and overvalued publicly traded equities that have a market capitalization greater than $500 million.

Due to the rapid growth of assets under management, Guardian Capital recently hired a new analyst, Jack Richardson, to support the research process. At the new analyst orientation meeting, the director of research made the following statements about equity valuation at Guardian:

Statement 1 "Analysts at Guardian Capital seek to identify mispricing, relying on price eventually converging to intrinsic value. However, convergence of the market price to an analyst's estimate of intrinsic value may not happen within the portfolio manager's investment time horizon. So, besides evidence of mispricing, analysts should look for the presence of a particular market or corporate event,—that is, a catalyst—that will cause the marketplace to re-evaluate the subject firm's prospects."

Statement 2 "An active investment manager attempts to capture positive alpha. But mispricing of assets is not directly observable. It is therefore important that you understand the possible sources of perceived mispricing."

Statement 3 "For its distressed securities fund, Guardian Capital screens its investable universe of securities for companies in financial distress."

Statement 4 "For its core equity fund, Guardian Capital selects financially sound companies that are expected to generate significant positive free cash flow from core business operations within a multiyear forecast horizon."

Statement 5 "Guardian Capital's research process requires analysts to evaluate the reasonableness of the expectations implied by the market price by comparing the market's implied expectations to his or her own expectations."

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After the orientation meeting, the director of research asks Richardson to evaluate three companies that are retailers of men's clothing: Diamond Co., Renaissance Clothing, and Deluxe Men's Wear.

Richardson starts his analysis by evaluating the characteristics of the men's retail clothing industry. He finds few barriers to new retail entrants, high intra-industry rivalry among retailers, low product substitution costs for customers, and a large number of wholesale clothing suppliers.

While conducting his analysis, Richardson discovers that Renaissance Clothing included three non-recurring items in their most recent earnings release: a positive litigation settlement, a one-time tax credit, and the gain on the sale of a non-operating asset.

To estimate each firm's intrinsic value, Richardson applies appropriate discount rates to each firm's estimated free cash flows over a ten-year time horizon and to the estimated value of the firm at the end of the ten-year horizon.

Michelle Lee, a junior technology analyst at Guardian, asks the director of research for advice as to which valuation model to use for VEGA, a fast growing semiconductor company that is rapidly gaining market share.

The director of research states that "the valuation model selected must be consistent with the characteristics of the company being valued."

Lee tells the director of research that VEGA is not expected to be profitable for several more years. According to management guidance, when the company turns profitable, it will invest in new product development; as a result, it does not expect to initiate a dividend for an extended period of time. Lee also notes that she expects that certain larger competitors will become interested in acquiring VEGA because of its excellent growth prospects. The director of research advises Lee to consider that in her valuation.

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9. Based on Statement 2, which of the following sources of perceived mispricing do active investment managers attempt to identify? The difference between:
   A. intrinsic value and market price.
   B. estimated intrinsic value and market price.
   C. intrinsic value and estimated intrinsic value.
10. With respect to Statements 3 and 4, which of the following measures of value would the distressed securities fund's analyst consider that a core equity fund analyst might ignore?
   A. Fair value
   B. Liquidation value
   C. Fair market value
11. With respect to Statement 4, which measure of value is *most* relevant for the analyst of the fund described?
   A. Liquidation value
   B. Investment value
   C. Going-concern value
12. According to Statement 5, analysts are expected to use valuation concepts and models to:
   A. value private businesses.
   B. render fairness opinions.
   C. extract market expectations.
13. Based on Richardson's industry analysis, which of the following characteristics of men's retail clothing retailing would *positively* affect its profitability? That industry's:
   A. entry costs.
   B. substitution costs.
   C. number of suppliers.

14. Which of the following statements about the reported earnings of Renaissance Clothing is *most accurate*? Relative to sustainable earnings, reported earnings are likely:
    A. unbiased.
    B. upward biased.
    C. downward biased.
15. Which valuation model is Richardson applying in his analysis of the retailers?
    A. Relative value
    B. Absolute value
    C. Sum-of-the-parts
16. Which valuation model would the director of research *most likely* recommend Lee use to estimate the value of VEGA?
    A. Free cash flow
    B. Dividend discount
    C. P/E relative valuation

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