EQUITY ASSET VALUATION WORKBOOK

Second Edition

Jerald E. Pinto, CFA

Elaine Henry, CFA

Thomas R. Robinson, CFA

John D. Stowe, CFA

with a contribution by

Raymond D. Rath, CFA

John Wiley & Sons, Inc.

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PART I

LEARNING OUTCOMES, SUMMARY OVERVIEW, AND PROBLEMS

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 two possible sources of perceived mispricing.
- Explain the going-concern assumption, contrast a going concern to a liquidation value concept of value, and identify the definition of value most relevant to public company valuation.
- List and discuss the uses of equity valuation.
- Explain the elements of industry and competitive analysis and the importance of evaluating the quality of financial statement information.
- Contrast absolute and relative valuation models and describe examples of each type of model.
- Illustrate the broad criteria for choosing an appropriate approach for valuing a particular company.

SUMMARY OVERVIEW

In this chapter, 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.
- 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.
  - 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.
  - 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.
  - 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.
  - Discloses any potential conflicts of interest 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 text 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 1-1, 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.