Define valuation and intrinsic value, and explain sources of perceived mispricing.
Intrinsic value (IV) is the value of an asset or security estimated by someone who has complete understanding of the characteristics of the asset or issuing firm. To the extent that market prices are not perfectly (informationally) efficient, they may diverge from intrinsic value. The difference between the analyst’s estimate of intrinsic value and the current price is made up of two components—the difference between the actual intrinsic value and the market price, and the difference between the actual intrinsic value and the analyst’s estimate of intrinsic value:

\[ IV_{\text{analyst}} - \text{price} = (IV_{\text{actual}} - \text{price}) + (IV_{\text{analyst}} - IV_{\text{actual}}) \]
Explain the going concern assumption and contrast a going concern value to a liquidation value.
LOS 30.b

The **going concern assumption** is simply the assumption that a company will continue to operate as a business as opposed to going out of business. The **liquidation value** is the estimate of what the assets of the firm would bring if sold separately, net of the company’s liabilities.
Describe definitions of value, and justify which definition of value is most relevant to public company valuation.
Fair market value is the price at which a hypothetical willing, informed, and able seller would trade an asset to a willing, informed and able buyer. Investment value is the value to a specific buyer after including any additional value attributable to synergies. Investment value is an appropriate measure for strategic buyers pursuing acquisitions.
Describe applications of equity valuation.
Equity valuation is the process of estimating the value of an asset by (1) using a model based on the variables the analyst believes influence the fundamental value of the asset, or (2) comparing it to the observable market value of “similar” assets. Equity valuation models are used by analysts in a number of ways. Examples include stock selection, reading the market, projecting the value of corporate actions, fairness opinions, planning and consulting, communication with analysts and investors, valuation of private business, and portfolio management.
Describe questions that should be addressed in conducting an industry and competitive analysis.
The five elements of industry structure as developed by Professor Michael Porter are:

1. Threat of new entrants in the industry.
2. Threat of substitutes.
5. Rivalry among existing competitors.

Quality of earnings issues can be broken down into several categories and may be addressed only in the footnotes and disclosures to the financial statements:

- Accelerating or premature recognition of income.
- Reclassifying gains and nonoperating income.
- Expense recognition and losses.
- Amortization, depreciation, and discount rates.
- Off-balance-sheet issues.
Contrast absolute and relative valuation models, and describe examples of each type of model.
LOS 30.f

An **absolute valuation model** is one that estimates an asset’s intrinsic value (e.g., the Discounted Dividend approach). **Relative valuation models** estimate an asset’s investment characteristics compared to the value of other firms (e.g., comparing P/E ratios to those of other firms in the industry).
Describe sum-of-the-parts valuation, and explain a conglomerate discount.
LOS 30.g

Sum-of-the-parts valuation is the process of valuing the individual components of a company and then adding these values together to obtain the value of the whole company. Conglomerate discount refers to the amount by which market price is lower than the sum-of-the-parts value. Conglomerate discount is an apparent price reduction applied by the markets to firms that operate in multiple industries.
Explain broad criteria for choosing an appropriate approach for valuing a given company.
LOS 30.h

When selecting an approach for valuing a given company, an analyst should consider whether the model fits the characteristics of the company, is appropriate based on the quality and availability of input data, and is suitable given the purpose of the analysis.
Distinguish among realized holding period return, expected holding period return, required return, return from convergence of price to intrinsic value, discount rate, and internal rate of return.
Return concepts:

- **Holding period** return is the increase in price of an asset plus any cash flow received from that asset, divided by the initial price of the asset. The holding period can be any length. Usually, it is assumed the cash flow comes at the end of the period:

  \[
  \text{holding period return} = r = \frac{P_1 - P_0 + CF_1}{P_0} = \frac{P_1 + CF_1}{P_0} - 1
  \]

- An asset’s **required return** is the minimum expected return an investor requires given the asset’s characteristics.
- If **expected return** is greater (less) than required return, the asset is undervalued (overvalued). The mispricing can lead to a return from convergence of price to intrinsic value.
- The **discount rate** is a rate used to find the present value of an investment.
- The **internal rate of return** (IRR) is the rate that equates the discounted cash flows to the current price. If markets are efficient, then the IRR represents the required return.
Calculate and interpret an equity risk premium using historical and forward looking estimation approaches.

(Continued on next card)
The equity risk premium is the return over the risk-free rate that investors require for holding equity securities. It can be used to determine the required return for specific stocks:

\[
\text{required return for stock } j = \text{risk-free return} + \beta_j \times \text{equity risk premium}
\]

where:
\[
\beta_j = \text{the “beta” of stock } j \text{ and serves as the adjustment for the level of systematic risk}
\]

A more general representation is:

\[
\text{required return for stock } j = \text{risk-free return} + \text{equity risk premium} + \text{other adjustments for } j
\]

A historical estimate of the equity risk premium consists of the difference between the mean return on a broad-based, equity-market index and the mean return on U.S. Treasury bills over a given time period.

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**Calculate** and **interpret** an equity risk premium using historical and forward looking estimation approaches.

(Continued on next card)
Forward-looking or ex ante estimates use current information and expectations concerning economic and financial variables. The strength of this method is that it does not rely on an assumption of stationarity and is less subject to problems like survivorship bias.

There are three types of forward-looking estimates of the equity risk premium:

- Gordon growth model.
- Macroeconomic models, which use current information, but are only appropriate for developed countries where public equities represent a relatively large share of the economy.
- Survey estimates, which are easy to obtain, but can have a wide disparity between opinions.

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**Calculate** and **interpret** an equity risk premium using historical and forward looking estimation approaches.
LOS 31.b (Part 3)

(Continued from previous card)

The Gordon growth model can be used to estimate the equity risk premium based on expectational data:

\[
\text{GGM equity risk premium} = \text{1-year forecasted dividend yield on market index} + \text{consensus long-term earnings growth rate} - \text{long-term government bond yield}
\]