



## FIN 366: INVESTMENTS

### EQUITY VALUATION: INTRINSIC VALUE AND DDM

### CRITICAL THINKING & CONCEPTUAL QUESTIONS

1. How should the relationship of the intrinsic value we estimate and the stock's current price inform our investing decisions?
2. Why would it make sense to buy a share that is undervalued or short a share that is overvalued? What do we think the market will "realize" or "figure out" about undervalued and overvalued stocks in the future?
3. How do we compute the required rate of return on a security?
4. What should you do if the required rate of return is greater than the return you expect on a security? Why?
5. We can determine the value of a share by taking the present value of an indefinite series of dividends. If we do this, why don't we need to know what the stock price is in the future?
6. A younger firm has experienced a high rate of dividend growth recently, though this is expected to fall to a steadier rate in the future. Do you think a (1) dividends over a discrete period model, (2) constant growth model, or (3) multistage growth model of the DDM would be best to value these shares?
7. A mature firm has a history of steady dividends over the past several years. Do you think the (1) dividends over a discrete period model, (2) constant growth model, or (3) multistage growth model of the DDM would be best to value these shares?
8. In practice, which is most common employed? (1) Dividends over a discrete period, (2) constant growth, or (3) multistage growth model?
9. In the two period DDM model, what assumption regarding  $P_1$  and  $V_1$  do we make?
10. In the multistage growth model, we may substitute the constant growth formula as the price of the stock  $P_H$  in the future. What assumption regarding  $P_H$  and  $V_H$  do we make for this model to be possible?
11. The constant growth DDM requires that  $k$  be greater than  $g$ . Why? What would happen if  $k$  were less than  $g$ ?
12. Look at the formulas for the DDM. Will the intrinsic value of a share increase or decrease in each of the following situations (assume everything else is held constant):
  - a. Forecasted dividends increase
  - b.  $k$  increases
  - c. You forecast a higher  $P_H$
  - d. You forecast a higher  $g$
13. **CHALLENGE** If  $g$  is the rate at which dividends are expected to grow in perpetuity or forever, what do we think might be some reasonable "ceilings" to this growth rate? *Hint: do we think a stock can grow faster than the economy overall forever?*

