LSE Summer School FM250 – Finance

Classwork 3: Stocks

Question 1

Respond briefly to the following statement: "You say stock price equals the present value of future dividends? That's crazy! All the investors I know are looking for capital gains."

Question 2

Consider the following three stocks:

- Stock A is expected to provide a dividend of \$10 a share forever.
- Stock B is expected to pay a dividend of \$5 next year. Thereafter, dividend growth is expected to be 4% a year forever.
- Stock C is expected to pay a dividend of \$5 next year. Thereafter, dividend growth is expected to be 20% a year for five years (i.e., until year 6) and zero thereafter.

If the required rate of return for each stock is 10%, which stock is the most valuable?

Question 3

Company Q's current return on equity (ROE) is 14%. It pays out one-half of earnings as cash dividends (payout ratio = .5). Current book value per share is \$50. Book value per share will grow as Q reinvests earnings.

Assume that the ROE and payout ratio stay constant for the next four years. After that, competition forces ROE down to 11.5% and the payout ratio increases to 0.8. The cost of capital is 11.5%.

- a. What are Q's EPS and dividends next year? How will EPS and dividends grow in years 2, 3, 4, 5, and subsequent years?
- b. What is Q's stock worth per share? How does that value depend on the payout ratio and growth rate after year 4?