FINA 1082 – Financial Management
Valuation of Equity Securities I
Tutorial Questions for Lecture 4

These questions do not need to be submitted and will be discussed in Tutorial 4. Note that detailed answers to these questions will only be provided in tutorials. This policy is in place to ensure that you attend your tutorial regularly and receive timely feedback from your tutor. If you are unsure of your answers you should check with your tutor, a pit stop tutor or the lecturer.

A. Short Answer Questions

A1. Indicate whether the following statements are true or false. Provide a brief explanation in each case.

a) The constant growth dividend model is ideal in valuing high-growth stocks

b) In the constant growth dividend model. G refers to the growth rate of past dividends

c) In the constant dividend growth model, it must be the case that (k_e-g) must be greater than or equal to zero

B. Problems

B1. Charles Biser expects the market price of Orangeco common stocks to increase from $32 per share currently to $38 next year. He also projects the current annual dividend of $0.94 per share will rise to $1.00 next year. Estimate Biser's expected return on the Orangeco stock.

B2. (CFA question) A common stock pays an annual dividend per share of $2.10. The risk-free rate is 7%, and the risk premium for this stock is 4%. The beta of this stock is similar to that of the market. If the annual dividend is expected to remain at $2.10, Calculate the estimated value of stock

B3. If the expected rate of return of the market portfolio is 15% and a stock with a beta of 1.0 pays a dividend yield of 4%, what must the market believe is the expected rate of price appreciation on that stock?

B4. (CFA question) Mike Brandreth, an analyst who specialises in the electronics industry, is preparing a research report on Dynamic Communication. A colleague suggests to Brandreth that he may be able to determine Dynamic's implied dividend growth rate from Dynamic's current common stock price, using the Gordon growth model. Brandreth believes that the

appropriate required rate of return for Dynamic's equity is 8 percent. Dynamic Communication has observed a dividend per share of $0.80 for the last 4 years.

a. Assume that the firm's current stock price of $58.49 equals intrinsic value. What sustained rate of dividend growth is implied by this value? Use the constant growth dividend discount model (i.e. , the Gordon growth model)

b. The management of Dynamic has indicated to Brandreth and other analysts that the company's current dividend policy will be continued. Is the use of the Gordon growth model to value Dynamic's common stock appropriate or inappropriate? Justify your response based on the assumptions of the Gordon growth model.

B5. The risk-free rate of return is 8%, the expected rate of return on the market portfolio is 15%, and the stock of Xyrong Corporation has a beta coefficient of 1.2. Xyrong pays out 40% of its earnings in dividends, and the latest earnings announced were $10 per share. Dividends were just paid and are expected to be paid annually. You expect that Xyrong will earn an ROE (Return on equity) of 20% per year on all reinvested earnings forever.

a. What is the intrinsic value of a share of Xyrong stock?

b. If the market price of a share is currently $100, and you expect the market price to be equal to the intrinsic value one year from now, what is your expected on-year holding-period return on Xyrong stock?