BUS312: Introduction to Corporate Finance

Assignment #9

Question #1

Investors currently require a rate of return of 10 percent per annum on the shares of Nickel Corporation, whose dividend payment in the past year *was* $0.50. The current market price is $12.50. What is the implied long-run rate of growth in dividends?

Question #2

Consider two firms which are more or less identical except for their share prices, growth in dividends, and their rates of return on equity. Both firms are expected to pay a $1 dividend per share in the upcoming year. Capital markets are efficient with respect to the information on these firms. How do the share prices of the firms differ? Is either one preferred by you as an investor?

Question #3

ABC expects earnings of $E per share per annum into the indefinite future from past investment in business activity. ABC reinvests 40% of yearly earnings at a reinvestment rate of return on equity of 15% per annum in perpetuity. DEF corporation is in the same industry and has similar risk characteristics to ABC. DEF, unlike ABC, does not reinvest any earnings. DEF expects constant yearly earnings and has a P/E ratio of 10. What is your best estimate of ABCs P/E ratio?

Question #4

Assume that financial markets are informationally efficient with respect to information on the firm described below.

ABC is composed of two divisions. The electronics division is well established and could easily be sold for 20 million dollars. The chemical division has been in the development stages but is now ready for financing. The chemical division requires assets of 24 million dollars to begin production. ABC has no debt in their financial structure. ABC is planning to use a rights offering of new common stock to raise the needed funds. One right will be given to each outstanding share. One right will be required to buy a new share at the subscription price.

The financing will double ABC's outstanding common shares. Share price is expect to fall by 25% after financing. Rights are expected to sell for $0.80 each.

What are the number of outstanding shares before and after the financing? What is ABC's common share price before and after financing? What NPV did financial markets attribute to the chemical division.

Question #5

ABC company has a retention ratio of 40% of earnings which is expected to continue. Financial analysts predict that ABC's cash earnings per share next year will be $1.2 and the company's investments will earn an annual rate of return on equity investment of 12%. ABC pays their dividends annually. The market capitalization rate on ABC's equity is 10 per cent per annum.

a. What is the payout ratio?
b. What is the value of a share in ABC?
c. What is the expected rate of growth rate of dividends?
d. What are dividends per share expected to be five years from now?
e. How much of the value of a share in ABC should be attributed to future productive growth potential arising from reinvestment of earnings?