Final Examination

QUESTION 1

Indicate whether the following statements are more likely to be true or false and briefly discuss:

a. The price of a AAA corporate bond with a 10% yield-to-maturity is higher than the price of a AAA corporate bond with a 12% coupon rate.

b. The "duration" of a ten year pure discount bond (a zero coupon bond) with a yield-to-maturity of 10% is greater than the duration of a 15 year coupon bond with a coupon rate of 12%.

c. Two simple "Gordon-type" stocks are in the same risk class and have the same earnings-per-share. The firm with the higher growth rate in earnings will have the higher price/earnings ratio.

d. Increasing financial leverage for a firm will increase the firm's earnings per share [assuming interest on debt expense is less than return being earned on the invested capital]. Thus higher leverage will increase a firm's stock price.

e. The Dow Jones Industrial Average is a stock market index of the 30 largest industrial companies in the U.S., each stock's price weighted by the total market value of securities for each firm.

QUESTION 2

Alpo Corporation is a firm currently paying out 100% of its net income as dividends ---expected to be $5.00 per share this coming year. The firm is expected to continue operations for twenty years and then go out of business with a liquidating payment to shareholders of $100. Stockholders in the firm seem willing to accept a 10% return for the risks in this industry.

Bongo Corporation is a firm in the same industry, paying out 50% of net income as an expected per share dividend of $2.50 this coming year. The firm is expected to grow at 10% per year for 10 years and 5% per year for the following 100 years (approximately forever after!).

a. Assuming investors know the information above, and that the market is in equilibrium, what is an appropriate price for each of the firms [make your assumptions and analysis clear]?
b. What is the expected P/ni ratio [price/earnings ratio] for each firm now? at the end of ten years? Which firm would make the better investment [assuming zero tax bracket]? Why?

c. If Alpo lasted 100 years instead of 20 years would that change the current value of the firm? Explain. [assume final liquidating payment at end of 100 years is still $ 100.]

QUESTION 3

Write a short note suitable for publication in the Financial Analysts Journal discussing one of the following topics.

[Do either (a) or (b) and include commentary on relevant academic research.]

(a) Earnings are an important variable in most valuation models. Discuss briefly strategies for forecasting earnings. After that, indicate what research seems to suggest about the ability of professionals to forecast earnings ----for next year ----for five years from now. Do "bad earnings forecasts" ever have an impact on stock prices? Why?

(b) There seem to be a large number of different theoretical structures for valuing common stocks. Compare three such theories, indicating the nature of each structure, how it might be tested, where it differs from the other two models, what types of stocks are most likely to fit the assumptions of each of the models. If possible, indicate for each model whether a 10% error in estimating risk [say assuming k = 11% when it is really 10%] or a 10% error in estimating dividends [or earnings] will lead to the greater error in estimating the intrinsic value of the stock.