## **END OF CHAPTER EXERCISES**

## Chapter 12 : Equity Finance And Stock Valuation

**Investments: Spot and Derivatives Markets** 

(Keith Cuthbertson, Dirk Nitzsche)

- 1. Does the dividend discount model ignore the mass of investors who have bought their shares with the intention of selling them in say 3 years time?
- 2. What practical use is there in knowing the beta of your stock portfolio?
- 3. Why might stock prices be highly volatile even though all investors act in a perfectly rational way?
- 4. Why is it better to short sell an overvalued stock and to simultaneously buy a different undervalued stock, rather than simply just buying the undervalued stock?
- 5. The dividends of company-X are expected to grow at the constant rate of 5% p.a. The last dividend payout was \$1.80 per share. The risk adjusted (required) rate of return is ER = 11% p.a. The current market price of the share is \$ 35. Should you purchase the share?
- 6. 'Internet' plc is expected to produce earnings per share in 2001 of 20 cents and in 2002 of 26 cents. Earnings growth thereafter is expected to be 10%. Past performance is indicated below.

Cents	1988	1989	1990
EPS (Earnings per share)	10	12	15
Dividends per share	4	4.8	6

- (a) If the rate of return on 'Internet' plc required by investors is 14%, what is the fair price for the share at the end of 2000?
- (b.) In the past 5 years Internet shares have provided a 10%, 12%, 3%, 6% and 8% return. Estimate the expected return and standard deviation of Internet plc.
- (c.) The expected return on the market is 7%, the standard deviation of market risk is 6%, correlation of Internet with the market is 0.7 and the risk free rate is 5%. If the current market price of Internet is P = 235, is Internet a "good buy"?
- 7. A firm is expected to pay dividends of 20p at the end of the year t=1. Dividends are then expected to grow at 5%. The (risk adjusted) required rate of return for this firm is

11%. What would you expect its current market price to be? If the dividend payout ratio is 60% what would you expect the price earnings ratio to be?