



INDIAN INSTITUTE OF MANAGEMENT KOZHIKODE
EXECUTIVE POSTGRADUATE PROGRAMMES
EPGP-02 and EEPF-03
ADVANCED CORPORATE FINANCE

Repeat Exam Question Paper – January 2011

Note:

- i) Figures to the right indicate marks.
- ii) Total Time: 3.00 hrs. (inclusive of 15 mins for quiz II)
- iii) Total marks End Term (50) quiz (10).
- iv) Please return the quiz II (multiple choice questions) sheet within the first 15 mins.

I. Answer the following question. All questions are compulsory and each question carries equal marks. Total marks for this section (25)

1. The following was the result of a regression of PE ratios on growth rates, betas, and payout ratios for stocks listed on NSE in April, 1993.

$$PE = 18.69 + 0.0695 * \text{growth} - 0.5082 * \text{beta} - 0.4262 * \text{payout} \quad R^2 = 0.35$$

You are attempting to value a private firm, JSW Ltd., with the following characteristics:

- The firm had net profits of Rs. 10 million. It did not pay dividends, but had depreciation allowances of Rs. 5 million and capital expenditures of Rs. 12 million in the most recent year. Working capital requirements were negligible.
- The earnings had grown at 25% over the previous five years and are expected to grow at the same rate over the next five years.
- The average beta of publically traded firms, in the same line of business, is 1.15 and the average debt-equity ratio of these firms is 25%. (The tax rate is 40 %.) The private firm is all equity financed firm.

- (i) Estimate the appropriate PE ratio for this private firm using the regression result (3)
- (ii) What would be some of your concerns (2)

2. Investor A purchased 10,00,000 series A preferred stock of company X at Rs. 1 per share at a pre-money valuation of Rs. 30,00,000 for a 25 percent stake on post-financing basis (i.e. Rs. 40,00,000) in the company (each series A preferred stock would get converted into a share of common stock). One year later, company X sells 10,00,000 shares of series B preferred stock at Rs. 0.50 per share (again convertible one-to-one share of common stock) at a pre-money valuation of Rs. 20,00,000 for a 20% stake on post- financing basis (Rs. 25,00,000) in company X. Each question below carries one mark each.

- (i) With no anti-dilution protection what would be the percentage stake of investor A, post issue of series B preferred stock.

- (ii) With full ratchet anti-dilution protection, how many stocks of company X would investor A be holding, post issue of series B preferred stock?
- (iii) With broad based weighted average anti dilution protection, how many stocks of company X would investor A be holding, post issue of series B preferred stock?
- (iv) With narrow based weighted average anti dilution protection, how many stocks of company X would investor A be holding, post issue of series B preferred stock?
- (v) Comment on other anti dilution protection measures.

3. The gold ornaments retailing division of D' Manas Diamonds Ltd. earns a return on investment of 15.5%, based on a capital employed of Rs. 26,80,000. The management team of the gold ornaments retailing division have decided to implement a project which will require an investment of Rs. 3,20,000. The project is expected to generate a profit Rs. 53,000 p.a. The divisional cost of capital is 13%. What will be the residual income of the gold ornaments division after the project is implemented.

4. A company finds that there is a correlation of 0.80 between the aluminum price at the London Metal Exchange and the aluminum price in India. The volatility of the prices at LME and in India is roughly the same. If the expected consumption of aluminum is 5,000 tonnes, what is the optimal hedge while using LME futures?

5. Firm A is planning to acquire firm B. Financial information for the two firms prior to and to the merger is shown below.

Particulars	A	B
Stock Price	25	20
EPS	1.5	1
Total Shares Outstanding	100,000	50,000
Total Earnings	150,000	50,000
Market Value of Equity	25,00,000	10,00,000

Handwritten notes:
 25
 1.5
 P/E ratio 15.66

Will this merger have a bootstrap effect? Please show your calculations clearly.

II. Write brief notes on the following. All questions are compulsory and carry equal marks. Total marks for this section. (25)

1. AEG and RIV ultimately give the same value?
2. Comment on the pitfalls of using PE ratio blindly for every company (as is being done in most cases now). Also suggest the best ratio for a given industry.
3. What alternative ways of measuring EVA performance were discussed in the class such that the issues raised in the case on Vyaderm Pharmaceuticals Ltd. is addressed.
4. Explain the concept of Bootstrapping with a illustration.
5. If you are a the Manager of a PE firm, what are the important clauses that you would include in your term sheet

Handwritten notes for question 5:
 Particulars | no. of shares | Price of share | total cost
 Rent | 3,000,000 | 1 |
 with no debt with full Ratchet
 with No Dilution
 30,00,000